


STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL				1. WELL NAME and NUMBER NBU 921-18M		
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>				3. FIELD OR WILDCAT NATURAL BUTTES		
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO				5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES		
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.				7. OPERATOR PHONE 720 929-6587		
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217				9. OPERATOR E-MAIL mary.mondragon@anadarko.com		
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU 0581		11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		
13. NAME OF SURFACE OWNER (if box 12 = 'fee')				14. SURFACE OWNER PHONE (if box 12 = 'fee')		
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')				16. SURFACE OWNER E-MAIL (if box 12 = 'fee')		
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute Tribe		18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>		19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>		
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	364 FSL 638 FWL	SWSW	18	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	364 FSL 638 FWL	SWSW	18	9.0 S	21.0 E	S
At Total Depth	364 FSL 638 FWL	SWSW	18	9.0 S	21.0 E	S
21. COUNTY UINTAH		22. DISTANCE TO NEAREST LEASE LINE (Feet) 364		23. NUMBER OF ACRES IN DRILLING UNIT 2400		
		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1000		26. PROPOSED DEPTH MD: 10535 TVD: 10535		
27. ELEVATION - GROUND LEVEL 4830		28. BOND NUMBER WYB000291		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496		

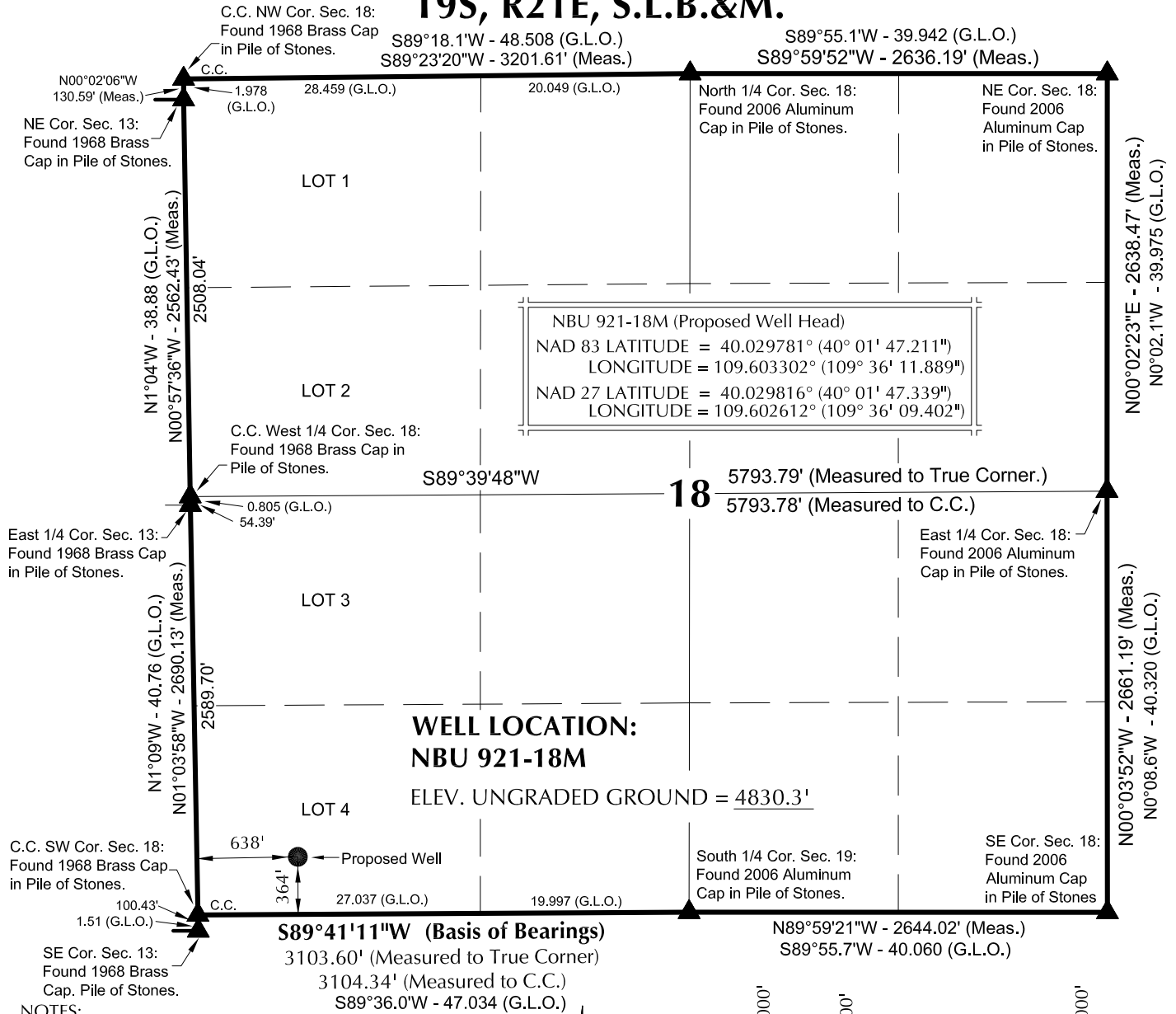
ATTACHMENTS**VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES**

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP
NAME Danielle Piernot	TITLE Regulatory Analyst
SIGNATURE	DATE 10/09/2009
PHONE 720 929-6156	EMAIL danielle.piernot@anadarko.com
API NUMBER ASSIGNED 43047507900000	APPROVAL  Permit Manager

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	10535		
Pipe	Grade	Length	Weight			
	Grade HCP-110 LT&C	935	11.6			
	Grade I-80 Buttruss	9600	11.6			

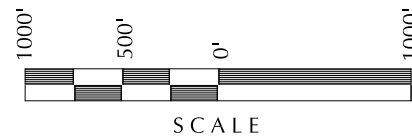
Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2705		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2705	36.0			

T9S, R21E, S.L.B.&M.



NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- 3. Bearings are based on Global Positioning Satellite observations.
- 4. Basis of elevation is Tri-Sta "Two Water" located in the NW $\frac{1}{4}$ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.



SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION No. 362251
STATE OF UTAH

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 921-18M

**NBU 921-18M
WELL PLAT
364' FSL, 638' FWL
LOT 4 OF SECTION 18, T9S, R21E,
S.L.B.&M., UTAH COUNTY, UTAH.**

609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE

ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

DATE SURVEYED: 04-16-09	SURVEYED BY: B.J.S.	SHEET NO: 1 1 OF 9
DATE DRAWN: 04-17-09	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised:	

NBU 921-18M

Surface: 364' FSL 638' FWL (SW/4SW/4) Lot 4
Sec. 18 T9S R21E

Uintah, Utah
Mineral Lease: UTU 0581

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. – 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,729'	
Birds Nest	1,983'	Water
Mahogany	2,502'	Water
Wasatch	5,116'	Gas
Mesaverde	8,232'	Gas
MVU2	9,217'	Gas
MVL1	9,737'	Gas
TD	10,535'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

6. **Evaluation Program:**

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,535' TD, approximately equals 6,564 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4,246 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). The air rig operation utilizes a 5M BOPE when drilling. This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

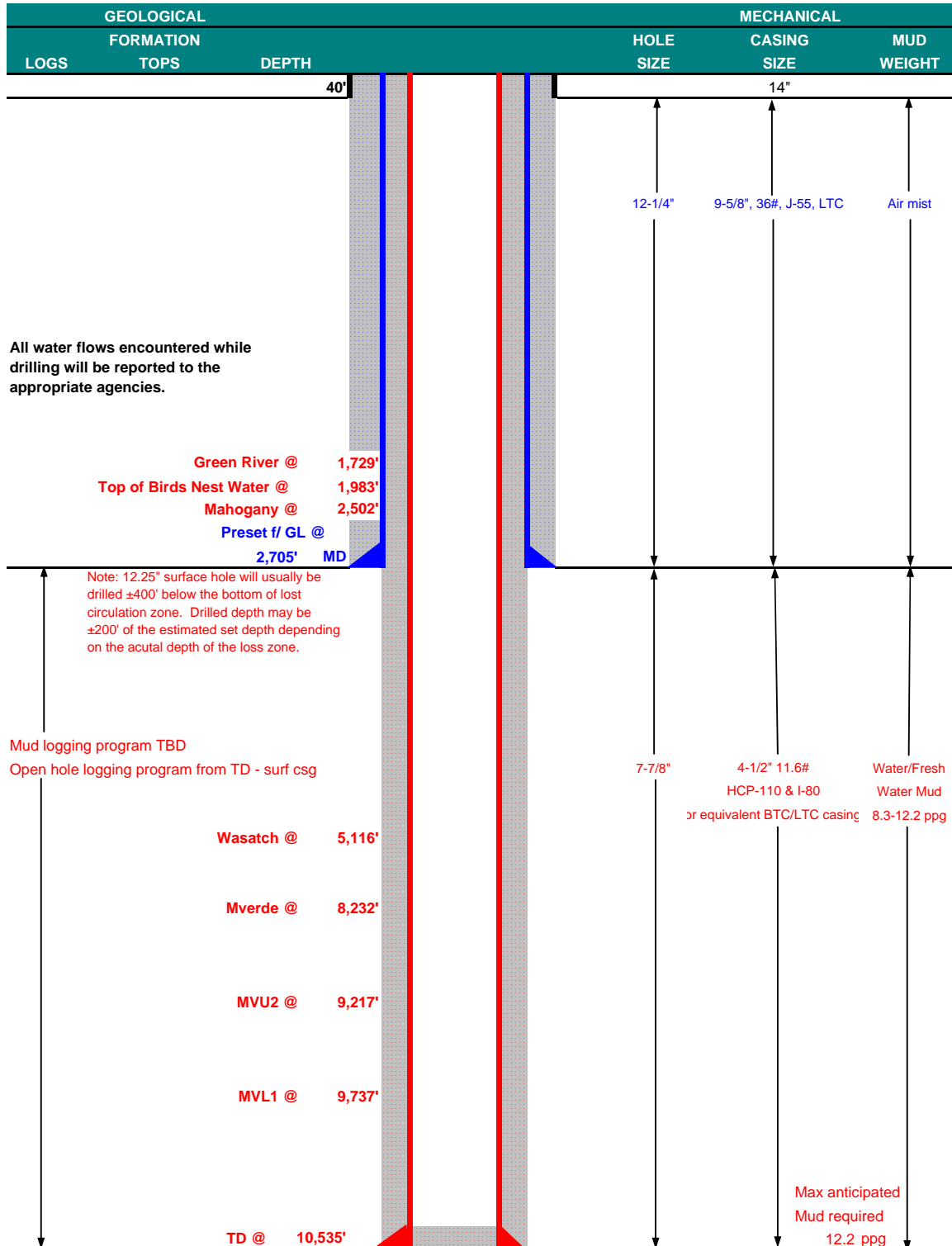
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP					DATE	October 8, 2009		
WELL NAME	NBU 921-18M					TD	10,535' MD/TVD		
FIELD	Natural Buttes		COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION		4,828'
SURFACE LOCATION	SW/4 SW/4	364' FSL	638' FWL	Sec 18	T 9S	R 21E	Lot 4	BHL	Straight Hole
	Latitude: 40.029781		Longitude: -109.603302		NAD 83				
OBJECTIVE ZONE(S)	Wasatch/Mesaverde								
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), Ute Tribe (SURFACE), UDOGM, Tri-County Health Dept.								





KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,520	2,020	453,000
SURFACE	9-5/8"	0 to 2705	36.00	J-55	LTC	0.81*	1.60	4.65
						7,780	6,350	278,000
PRODUCTION	4-1/2"	0 to 9600	11.60	I-80	BTC	1.78	1.04	2.80
						10,690	8,650	279,000
		9600 to 10535	11.60	HCP-110	LTC	2.45	1.29	31.62

*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.07

1) Max Anticipated Surf. Press.(MASP) (Surf Csg) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac grad x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.2 ppg)

0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 4,246 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 12.2 ppg)

0.62 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 6,564 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18
			+ 0.25 pps flocele				
Option 1							
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
			Premium cmt + 2% CaCl				
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	2,205'	Prem cmt + 16% Gel + 10 pps gilsonite	250	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOC				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,615'	Premium Lite II + 0.25 pps celloflake +	440	40%	11.00	3.38
			5 pps gilsonite + 10% gel '+' 1% Retarder				
	TAIL	5,920'	50/50 Poz/G + 10% salt + 2% gel	1450	40%	14.30	1.31
			+ 0.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint for a total of 15 bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

John Huycke / Emile Goodwin

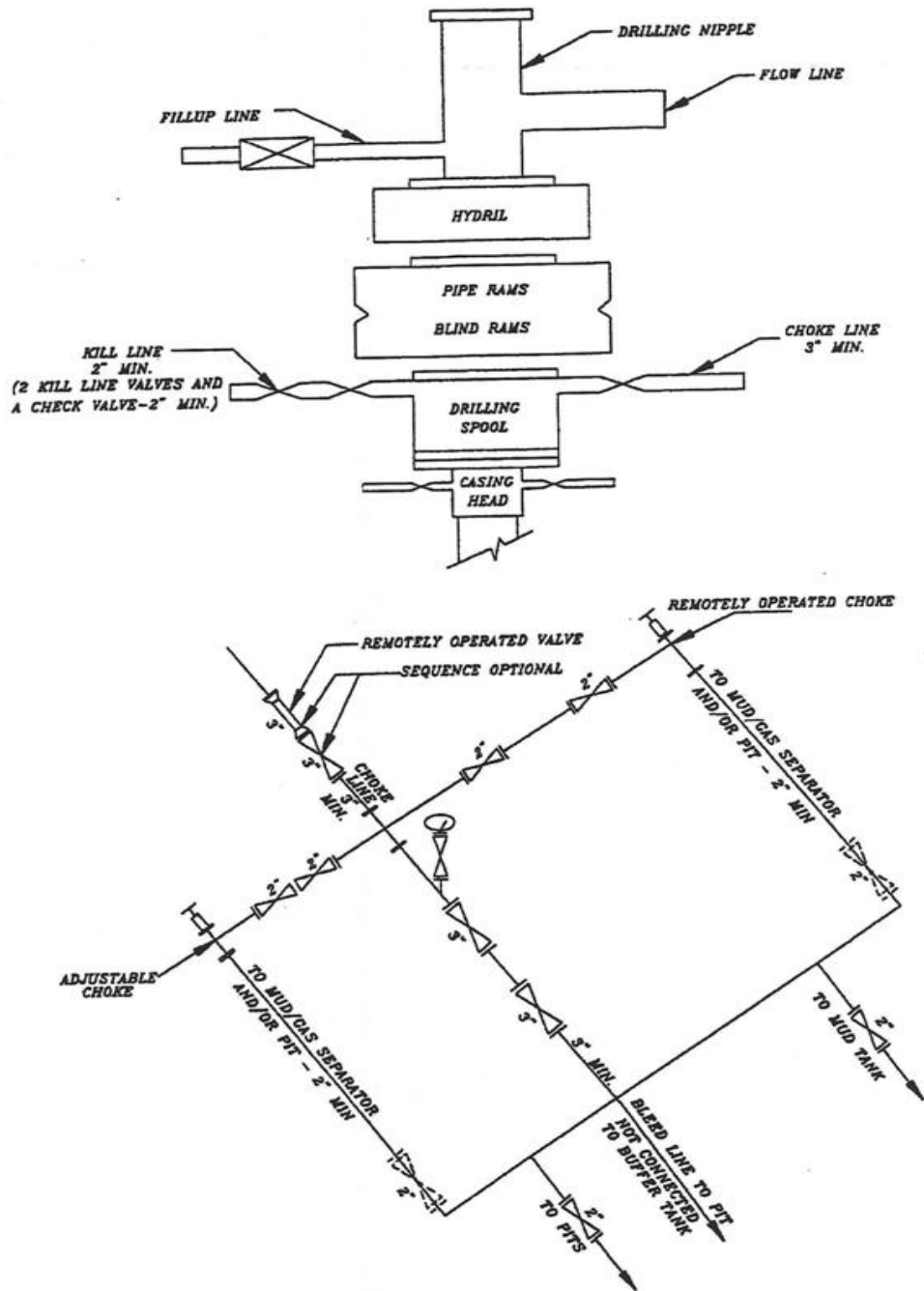
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DRILLING SUPERINTENDENT:

John Merkel / Lovel Young

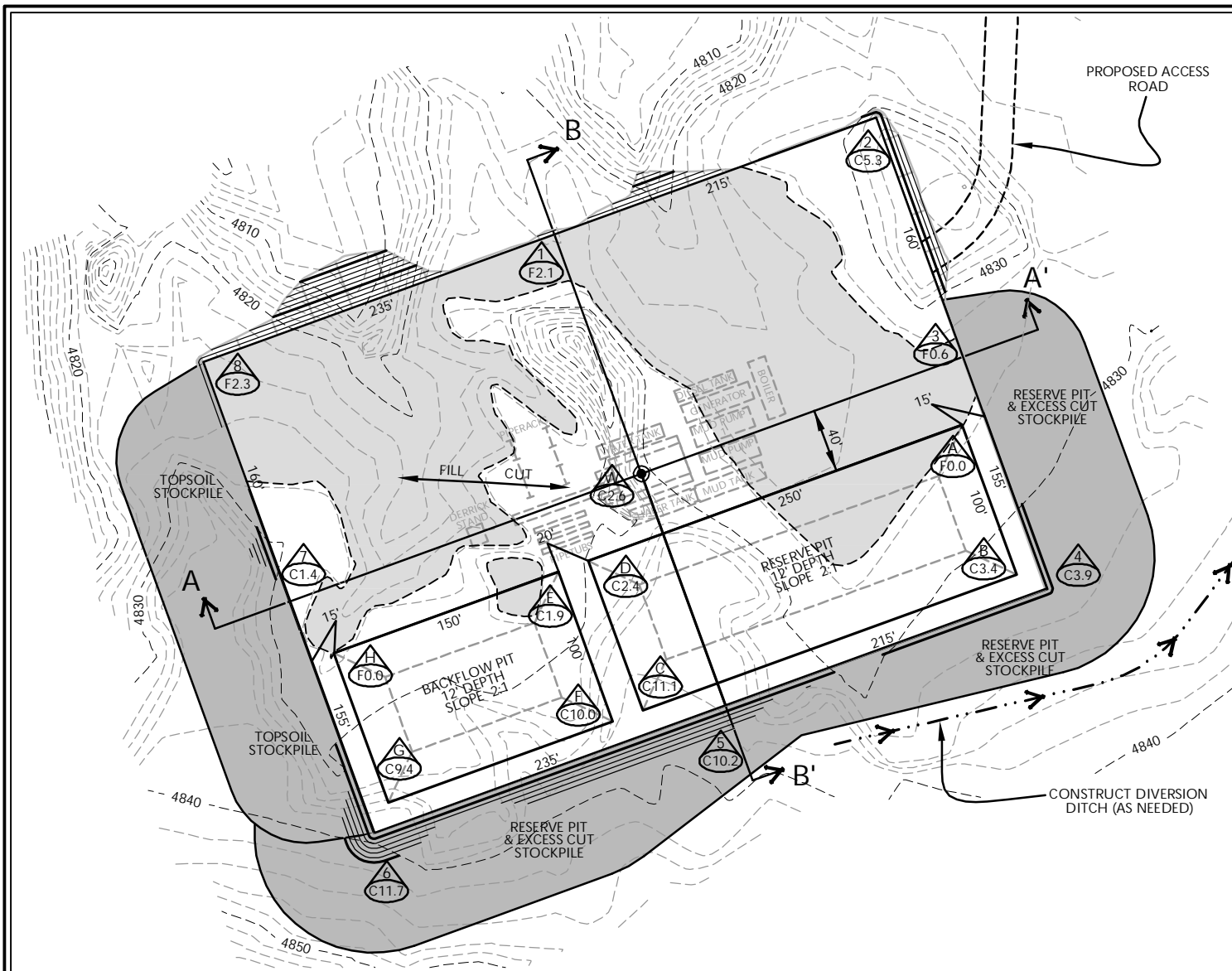
DATE:

EXHIBIT A NBU 921-18M



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

'APIWELLIN0:43047507900000'



WELL PAD LEGEND

- WELL LOCATION
- - - EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)

WELL PAD NBU 921-18M QUANTITIES

EXISTING GRADE @ LOC. STAKE = 4,830.3'
FINISHED GRADE ELEVATION = 4,827.7'

CUT SLOPES = 1.5:1

FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 9,855 C.Y.
TOTAL FILL FOR WELL PAD = 9,324 C.Y.
TOPSOIL @ 6" DEPTH = 2,848 C.Y.
EXCESS MATERIAL = 531 C.Y.
TOTAL PAD DISTURBANCE = 3.53 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 28,730 BARRELS
RESERVE PIT VOLUME
+/- 7,720 CY
BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
+/- 15,900 BARRELS
BACKFLOW PIT VOLUME
+/- 4,350 CY

Kerr-McGee Oil & Gas Onshore, LP

1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 921-18M

WELL PAD - LOCATION LAYOUT

NBU 921-18M

364' FSL, 638' FWL

LOT 4 OF SECTION 18, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

Scale:	1"=100'	Date:	4/24/09
REVISED:		BJR	8/31/09

SHEET NO:

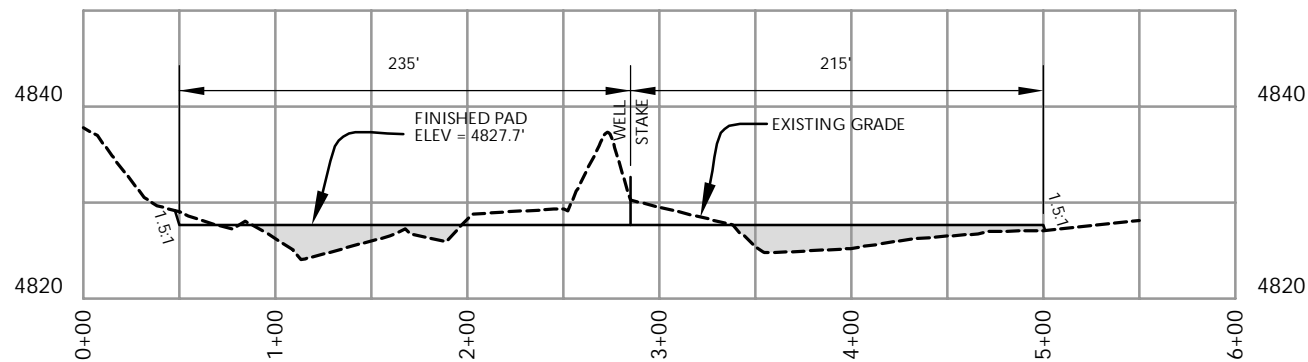
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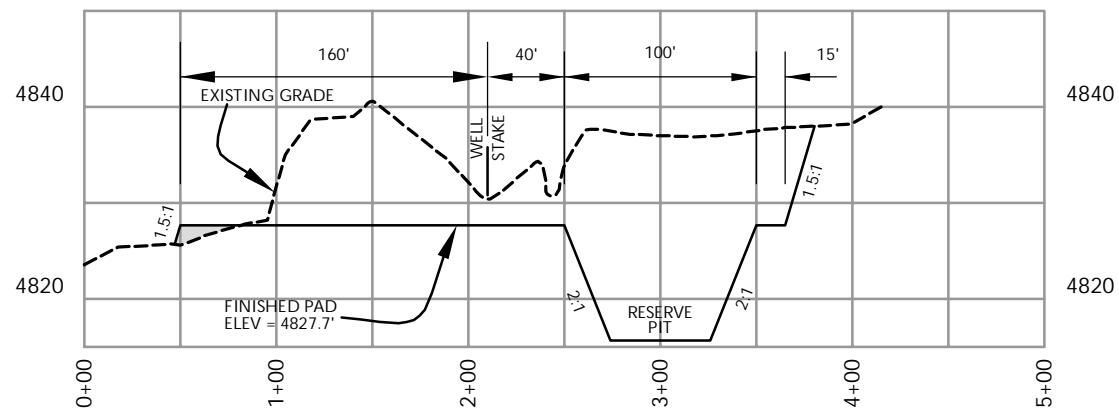
TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

HORIZONTAL 0 50 100 1" = 100'
2' CONTOURS



CROSS SECTION A-A'



CROSS SECTION B-B'

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 921-18M

WELL PAD - CROSS SECTIONS
NBU 921-18M

364' FSL, 638' FWL
LOT 4 OF SECTION 18, T9S, R21E
S.L.B.&M., UINAH COUNTY, UTAH



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371 Coffeen Avenue
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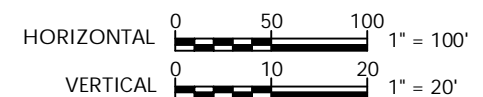
Date: 4/24/09

SHEET NO:

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3 OF 9

REVISÉ:

BJR
8/31/09

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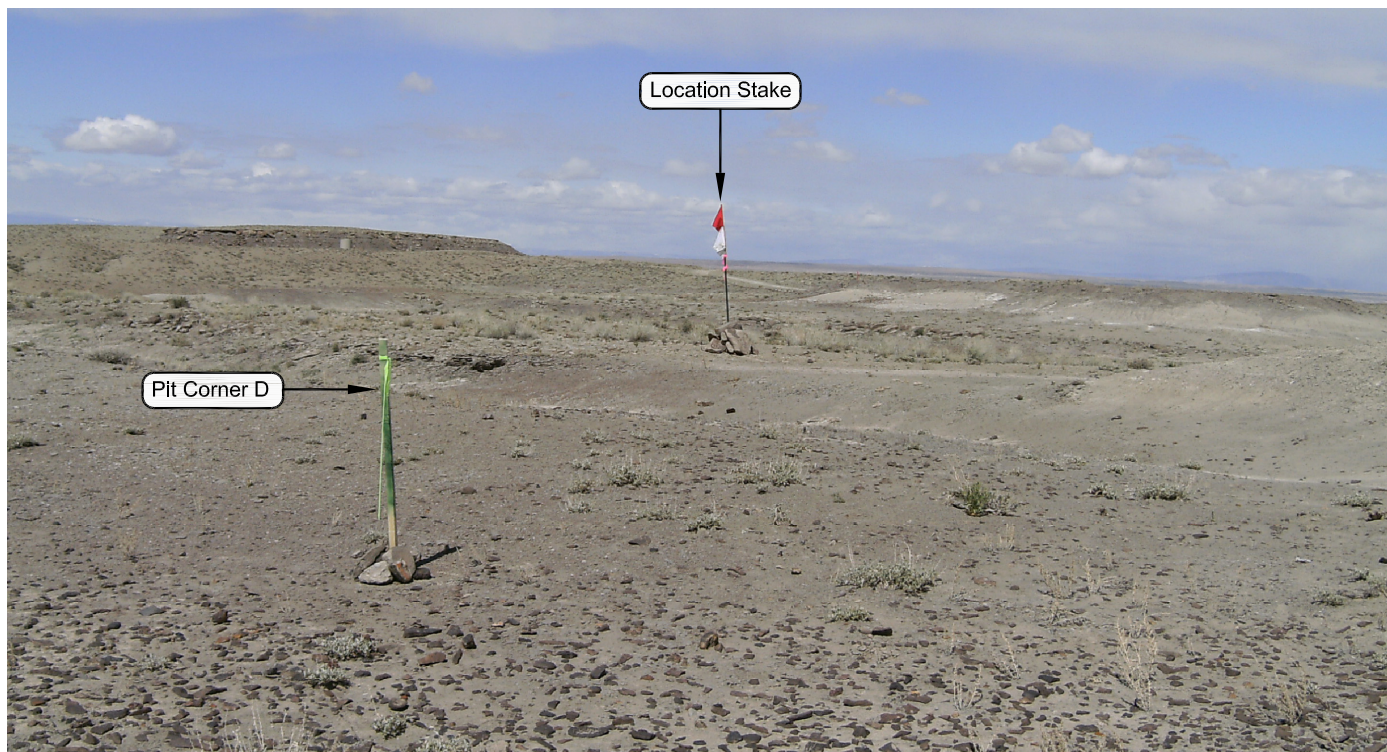


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY

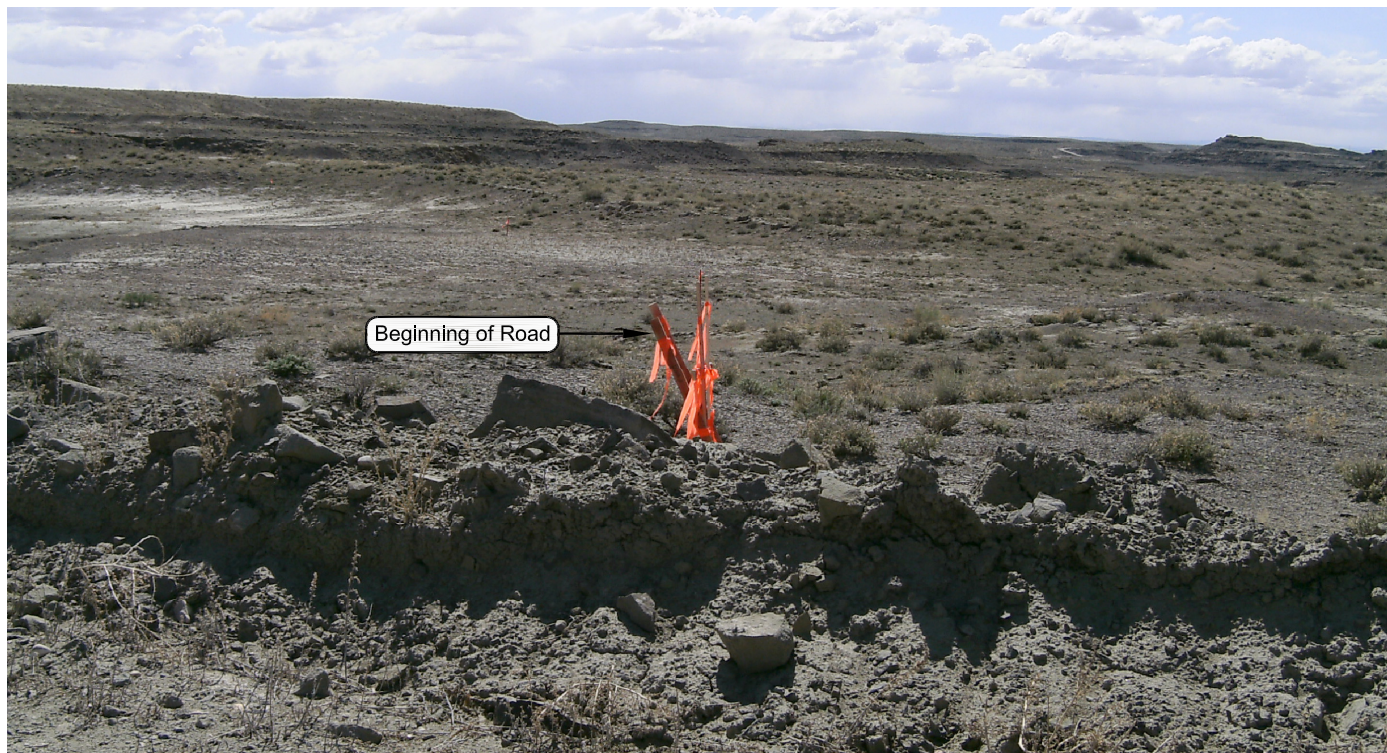


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHWESTERLY

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

Well Pad - NBU 921-18M

**NBU 921-18M
LOCATION PHOTOS
364' FSL, 638' FWL
LOT 4 OF SECTION 18, T9S, R21E,
S.L.B.&M., UTAH COUNTY, UTAH.**



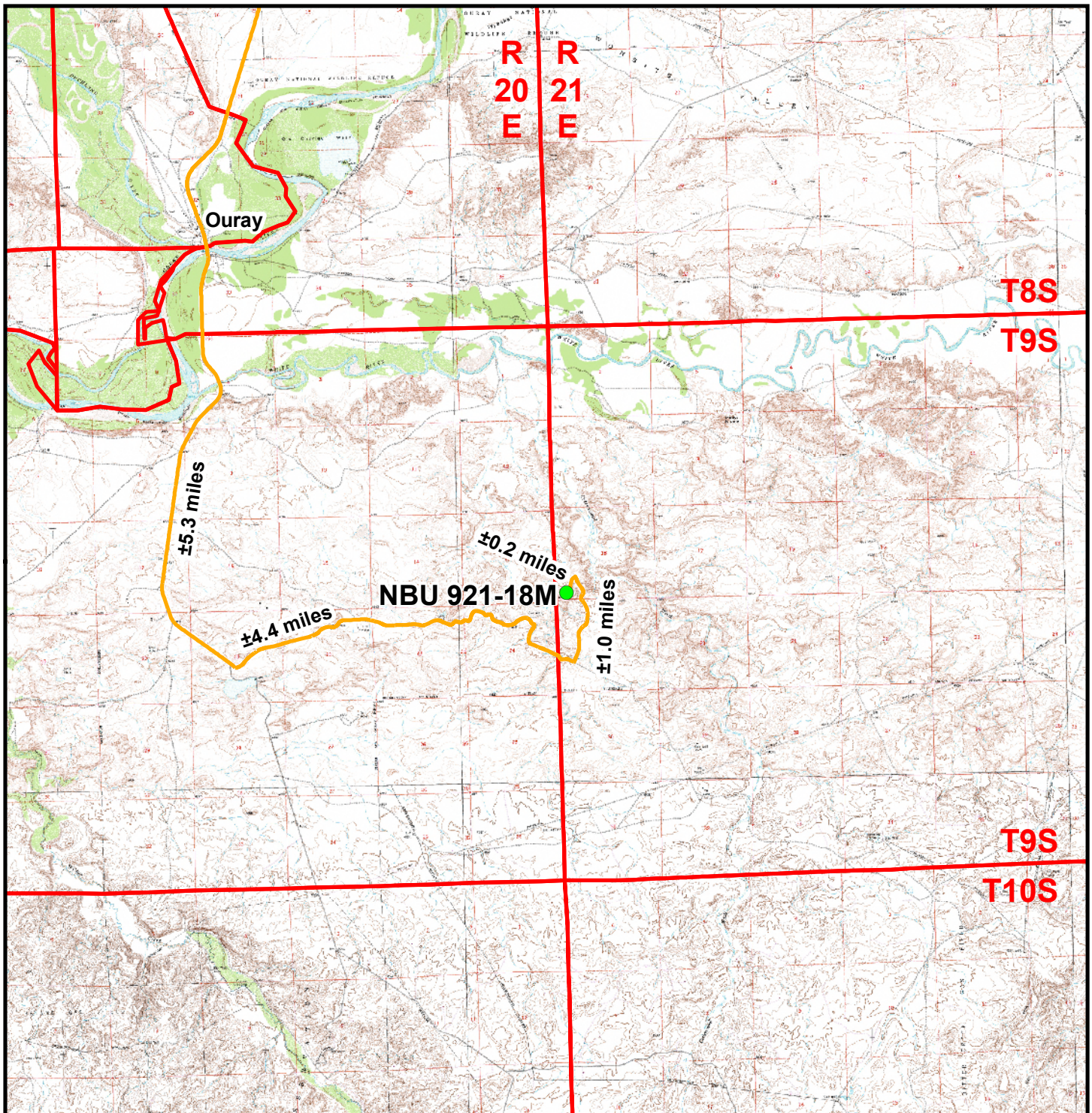
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ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 04-16-09	PHOTOS TAKEN BY: B.J.S.	SHEET NO: 4 4 OF 9
DATE DRAWN: 04-17-09	DRAWN BY: M.W.W.	
Date Last Revised:		



Legend

- Proposed NBU 921-18M Well Location
- Access Route - Proposed

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

Well Pad - NBU 921-18M

NBU 921-18M

Topo A

364' FSL, 638' FWL

Lot 4 of Section 18, T9S, R21E

S.L.B.&M., Uintah County, Utah

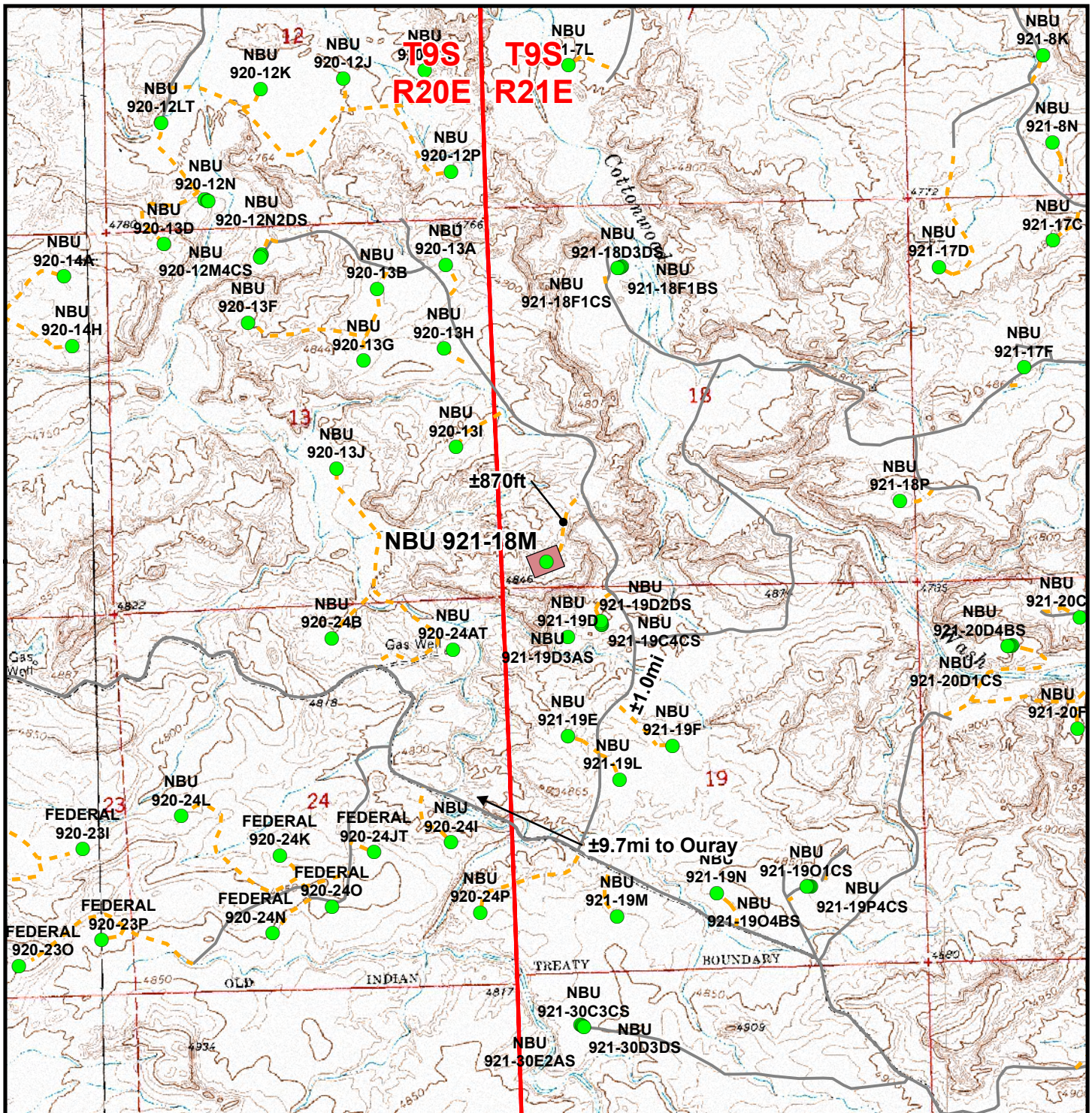


Scale: 1:100,000	NAD83 USP Central
Drawn: JELo	Date: 4 May 2009
Revised: TL	Date: 30 Sept 2009

Sheet No:

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Legend

- Well - Proposed
- Well Pad
- - - Road - Proposed
- Road - Existing

Total Proposed Road Length: ±870ft

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

Well Pad - NBU 921-18M

NBU 921-18M

Topo B

364' FSL, 638' FWL

Lot 4 of Section 18, T9S, R21E

S.L.B.&M., Uintah County, Utah



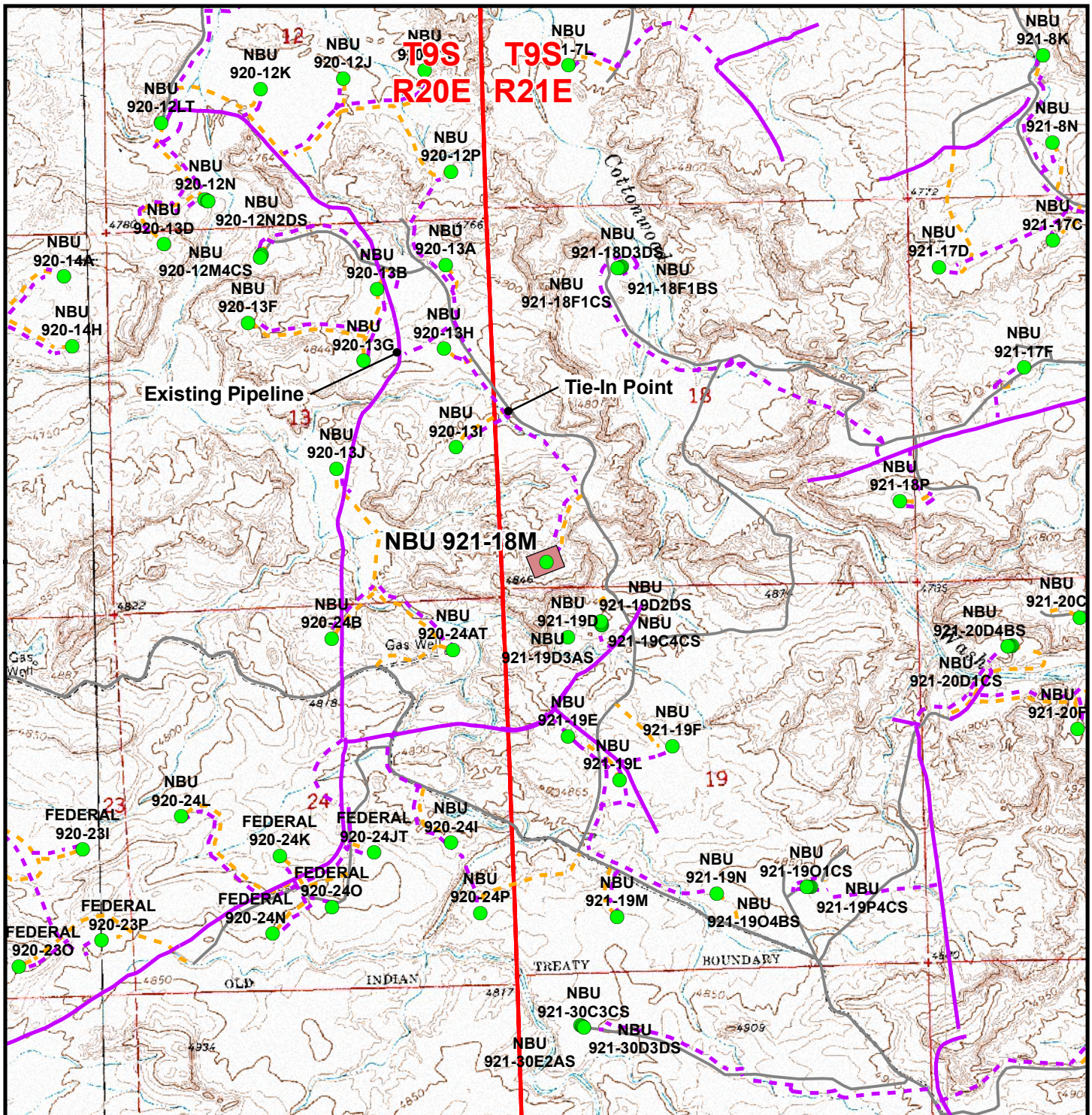
Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: JELo	Date: 4 May 2009
Revised: TL	Date: 30 Sept 2009

Sheet No:

6

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7 of 9



Legend

- Well - Proposed
- Well Pad
- Pipeline - Proposed
- Road - Proposed
- Pipeline - Existing
- Road - Existing

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: $\pm 2,410$ ft
 Proposed Pipeline Length Around Pad: ± 660 ft

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street, Denver, Colorado 80202

Well Pad - NBU 921-18M

NBU 921-18M

Topo D

364' FSL, 638' FWL

Lot 4 of Section 18, T9S, R21E

S.L.B.&M., Uintah County, Utah



Scale: 1" = 2,000ft
 NAD83 USP Central
 Drawn: JELo
 Revised: TL
 Date: 4 May 2009
 Date: 30 Sept 2009

Sheet No:

8

8 of 9

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD - NBU 921-18M
WELL – NBU 921-18M
Section 18, T9S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 5.3 MILES TO THE INTERSECTION OF A SERVICE ROAD TO THE NORTHEAST. EXIT LEFT AND PROCEED IN A NORTHEASTERLY THEN SOUTHEASTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 4.4 MILES TO A SECOND SERVICE ROAD TO THE NORTH. EXIT LEFT AND PROCEED NORTHERLY ALONG THE SECOND SERVICE ROAD APPROXIMATELY 1.0 MILES TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 870 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 41.6 MILES IN A SOUTHERLY DIRECTION.

NBU 921-18M

Surface: 364' FSL 638' FWL (SW/4SW/4) Lot 4
Sec. 18 T9S R21E

Uintah, Utah
Mineral Lease: UTU 0581

Surface Owner: Ute Indian Tribe

ONSHORE ORDER NO. 1

***MULTI-POINT SURFACE USE & OPERATIONS PLAN
SUBMITTED WITH SITE-SPECIFIC INFORMATION***

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA) documents. An NOS was submitted showing the surface location in SW/4 SW/4 of Section 18 T9S R21E.

This Surface Use Plan of Operations (SUPO) or 13-point plan provides the site-specific information for the above-referenced wells. This information is to be incorporated by reference into the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee). The MDP is available upon request from the BIA-Ft Duchesne Office.

An on-site meeting was held on September 1, 2009.

A. Existing Roads:

- A) Refer to Topo Map A for directions to the location.
- B) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

B. Planned Access Roads:

See MDP for additional details on road construction.

Approximately $\pm 870'$ (± 0.16 miles) of new access road is proposed. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site and are typically shown on the attached Exhibits and Topo maps.

C. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

D. Location of Existing and Proposed Facilities:

See MDP for additional details on Existing and Proposed Facilities.

The following guidelines will apply if the well is productive.

Approximately $\pm 3,070'$ (± 0.58 miles) of new pipeline is proposed for this well. Please refer to the attached Topo Map D for existing pipeline. Appropriate surface use agreements have been or will be obtained from the Ute Indian Tribe. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place

E. Location and Type of Water Supply:

See MDP for additional details on Location and Type of Water Supply.

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

No water well is to be drilled on this lease.

F. Source of Construction Materials:

See MDP for additional details on Source of Construction Materials.

G. Methods of Handling Waste Materials:

See MDP for additional details on Methods of Handling Waste Materials.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E
NBU #159 in Sec. 35 T9S R21E
Ace Oilfield in Sec. 2 T6S R20E
MC&MC in Sec. 12 T6S R19E
Pipeline Facility in Sec. 36 T9S R20E
Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
Bonanza Evaporation Pond in Sec. 2 T10S R23E

H. Ancillary Facilities:

See MDP for additional details on Ancillary Facilities.

None are anticipated.

I. Well Site Layout: (See Location Layout Diagram)

See MDP for additional details on Well Site Layout.

All pits will be fenced according to the following minimum standards:

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

J. Plans for Reclamation of the Surface:

See MDP for additional details on Plans for Reclamation of the Surface.

Kerr-McGee shall call the BIA for the seed mixture prior to starting interim and/or final reclamation actions.

K. Surface/Mineral Ownership:

The well pad and access road are located on lands owned by:

Ute Indian Tribe
PO Box 70
Fort Duchesne, Utah 84026
435-722-5141

The mineral ownership is listed below:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
435-781-4400

L. Other Information:

See MDP for additional details on Other Information.

M. Lessee's or Operators' Representative & Certification:

Kathy Schneebeck Dulnoan
Staff Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6007

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.


Kathy Schneebeck Dulnoan

October 9, 2009
Date

CLASS I REVIEW OF KERR-MCGEE OIL & GAS
ONSHORE LP'S 51 PROPOSED WELL LOCATIONS
(T9S, R21E, SECTIONS 7, 8, 10, 11, 12,
17, 18, 19, 20, 23, 25, AND 30)
IN Uintah COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Ute Tribal Land
Uintah and Ouray Agency

Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

MOAC Report No. 09-39

May 11, 2009

United States Department of Interior (FLPMA)
Permit No. 09-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

Ute Tribal Permit No. A09-363

IPC #09-81

Paleontological Reconnaissance Survey Report

**Survey of Kerr McGee's Proposed Well Pads, Access Roads,
and Pipelines for "NBU #921-18M, 18N, 19F, 20F, & 20H"
(Sec. 18-21, T 9 S, R 21 E)**

Ouray SE
Topographic Quadrangle
Uintah County, Utah

June 18, 2009

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078



Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237

(303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Report Number: GCI #97

Operator: Kerr-McGee Oil & Gas Onshore LP

Wells: NBU 921-18M

Pipeline: Associated pipeline leading to proposed well pad

Access Road: Associated access road leading to proposed well pad

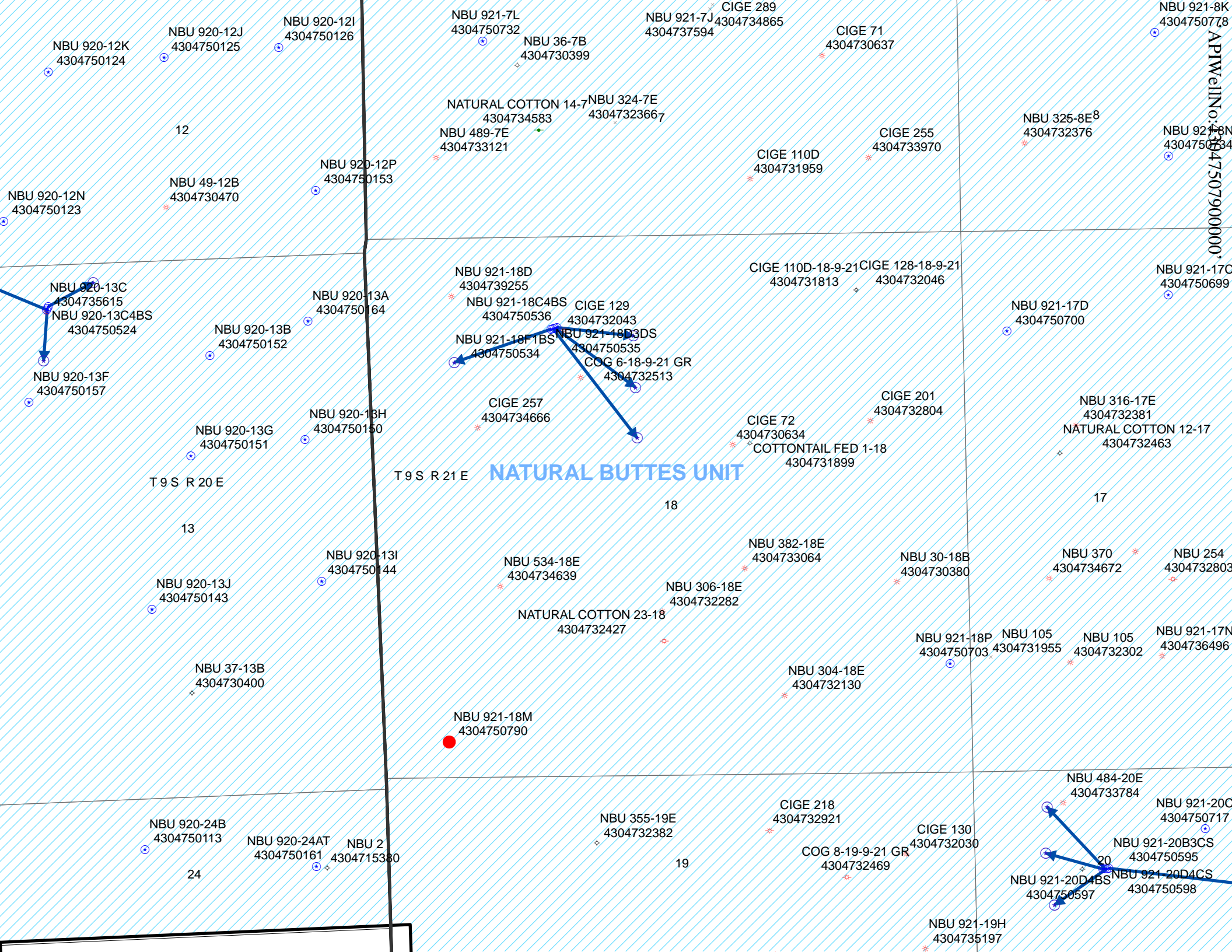
Location: Section 18, Township 9 South, Range 21 East; Uintah County, Utah

Survey-Species: Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus*)

Date: August 26 and September 15, 2009

Observers: Grasslands Consulting, Inc. Biologists: Chris Gayer, Dan Hamilton, and Garrett Peterson.

Weather: Partly cloudy, 80-90°F, 0-5 mph winds with no precipitation.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

October 16, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2009 Plan of Development Natural Buttes Unit
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
43-047-50768	NBU 922-30N1S Sec 30 T09S R22E 0561 FSL 1806 FWL BHL Sec 30 T09S R22E 0963 FSL 1735 FWL	
43-047-50790	NBU 921-18M Sec 18 T09S R21E 0364 FSL 0638 FWL	
43-047-50791	NBU 921-100 Sec 10 T09S R21E 0765 FSL 1965 FEL	
43-047-50792	NBU 921-10M Sec 10 T09S R21E 0445 FSL 0284 FWL	

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:10-16-09

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/9/2009

API NO. ASSIGNED: 43047507900000

WELL NAME: NBU 921-18M

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SWSW 18 090S 210E

Permit Tech Review: ☒

SURFACE: 0364 FSL 0638 FWL

Engineering Review: ☒

BOTTOM: 0364 FSL 0638 FWL

Geology Review: ☒

COUNTY: UINTAH

LATITUDE: 40.02978

LONGITUDE: -109.60257

UTM SURF EASTINGS: 619238.00

NORTHINGS: 4431788.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0581

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 2 - Indian

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

☒ **PLAT**

☒ **Bond:** FEDERAL - WYB000291

☐ **Potash**

☒ **Oil Shale 190-5**

☐ **Oil Shale 190-3**

☐ **Oil Shale 190-13**

☒ **Water Permit:** Permit #43-8496

☐ **RDCC Review:**

☐ **Fee Surface Agreement**

☒ **Intent to Commingle**

Commingle Approved

LOCATION AND SITING:

☐ **R649-2-3.**

Unit: NATURAL BUTTES

☐ **R649-3-2. General**

☐ **R649-3-3. Exception**

☒ **Drilling Unit**

Board Cause No: Cause 173-14

Effective Date: 12/2/1999

Siting: 460' fr u bdry & uncomm. tract

☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
3 - Commingle - ddoucet
4 - Federal Approval - dmason
17 - Oil Shale 190-5(b) - dmason



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 921-18M
API Well Number: 43047507900000
Lease Number: UTU 0581
Surface Owner: INDIAN
Approval Date: 10/21/2009

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingling:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

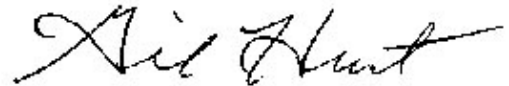
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

A handwritten signature in black ink, appearing to read "Gil Hunt", with a stylized, cursive script.

Gil Hunt
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 921-18M
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0364 FSL 0638 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 18 Township: 09.0S Range: 21.0E Meridian: S		9. API NUMBER: 43047507900000
PHONE NUMBER: 720 929-6007 Ext		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
COUNTY: UINTAH		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 10/20/2010 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: October 25, 2010

By:

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 10/19/2010



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047507900000

API: 43047507900000

Well Name: NBU 921-18M

Location: 0364 FSL 0638 FWL QTR SWSW SEC 18 TWP 090S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 10/21/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**Approved by the
Utah Division of
Oil, Gas and Mining**

Signature: Danielle Piernot

Date: 10/19/2010

Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: October 25, 2010

By: 

RECEIVED October 19, 2010

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 10 2009

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU0581
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator KERR MCGEE OIL & GAS ONSHORE Contact: DANIELLE E PIERNOT Email: Danielle.Piernot@anadarko.com		7. If Unit or CA Agreement, Name and No. UTU63047A
3a. Address 1368 SOUTH 1200 EAST VERNAL, UT 84078		8. Lease Name and Well No. NBU 921-18M
3b. Phone No. (include area code) Ph: 720-929-6156 Fx: 720-929-7156		9. API Well No. 43-047-50790
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface Lot 4 364FSL 638FWL 40.02978 N Lat, 109.60330 W Lon At proposed prod. zone Lot 4 364FSL 638FWL 40.02978 N Lat, 109.60330 W Lon		10. Field and Pool, or Exploratory NATURAL BUTTES
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 11 MILES SOUTHEAST OF OURAY, UTAH		11. Sec., T., R., M., or Blk. and Survey or Area Sec 18 T9S R21E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 364 FEET	16. No. of Acres in Lease 2399.60	12. County or Parish UINTAH
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROXIMATELY 1000 FEET		13. State UT
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4830 GL		17. Spacing Unit dedicated to this well
22. Approximate date work will start 11/02/2009		20. BLM/BIA Bond No. on file WYB000291
		23. Estimated duration 60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) DANIELLE E PIERNOT Ph: 720-929-6156	Date 10/09/2009
Title REGULATORY ANALYST		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date JUN 16 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

RECEIVED

Electronic Submission #70444 verified by the BLM Well Information System
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal
Committed to AFMSS for processing by ROBERT HANSEN on 10/09/2009 (10RRH0012AE)

JUN 23 2011

NOS and posted 10/20/09

NOTICE OF APPROVAL

DIV. OF OIL, GAS & MINING

AFMSS#

UDOGM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

10RRH0012AE

NO NOS



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Kerr McGee Oil & Gas Onshore
Well No: NBU 921-18M
API No: 43-047-50790

Location: Lot 4, Sec. 18, T9S, R21E
Lease No: UTU-0581
Agreement: Natural Buttes Unit

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov .
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)***

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- Paint new and old (existing) facilities "Shadow Gray."
- Monitor by a permitted archaeologist during construction operations.
- Monitor by a permitted paleontologist during the construction process.
- Install temporary fence to surround Uinta Basin hookless cactus near the well pad prior to construction operations to ensure 100-foot avoidance offset.
- Construct a low-water crossing on the access road as depicted on the cut sheet.
- At the discretion of the Tribal technician, install a culvert on the access road.
- Divert storm water runoff from well pad by construction a diversion ditch from the southwest to the northeast on the south side of the well pad.
- Construct a long-term (life of well) ditch around the well pad as part of interim reclamation to divert storm water runoff from the pad.
- In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002 (See Appendix D), a raptor survey would take place during raptor nesting season (January 1 through September 30) and conduct is operations according to specifications in the guidelines. The BLM and USFWS recommend a 1/4-mile avoidance buffer from active great horned owl nests from February 1 to September 30.
- Conduct a new biological survey in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus and the 2008 BLM RMP ROD, in include a 300-foot buffer from the proposed construction operations (See Appendix D) and construct operation according to agency specification and the requirements of the BO issued as a result of Section 7 USFWS consultation.

BIA Standard Conditions of Approval

- Soil erosion will be mitigated by reseeding all disturbed areas.
- The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.
- An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.
- The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.
- A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.
- Major low water crossings will be armored with pit run material to protect them from erosion.
- All personnel should refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.
- If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.
- Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.
- Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.
- If project construction operations are scheduled to occur after December 31, 2009, KMG should conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002. If active raptor nest are indentified during a new survey, KMG should conduct its operations according to the seasonal restrictions detailed in the Uinta basin-specific RMP

guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines (See Appendix D).

- USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix D).
- All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
- If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

- A Gama Ray Log shall be run from TD to surface.

Variances Granted:

Air Drilling:

- Properly lubricated and maintained rotating head, variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.
- Blooie line discharge 100' from the well bore, variance granted for blooie line discharge to be 45' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for two truck/trailer mounted air compressors located within 40 feet from the well bore and 60' from the blooie line.
- In lieu of mud products on location, Kerr McGee will fill the reserve pit with water for kill fluid.
- Automatic igniter. Variance granted for igniter due to there being no productive formations while drilling with air.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581			
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 921-18M			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0364 FSL 0638 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 18 Township: 09.0S Range: 21.0E Meridian: S		9. API NUMBER: 43047507900000			
10. FIELD and POOL or WILDCAT: NATURAL BUTTES		COUNTY: UINTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		STATE: UTAH			
TYPE OF SUBMISSION <input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 10/21/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	TYPE OF ACTION <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER:
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.					
Approved by the Utah Division of Oil, Gas and Mining Date: 09/20/2011 By:					
NAME (PLEASE PRINT) Danielle Piernot		PHONE NUMBER 720 929-6156			
SIGNATURE N/A		TITLE Regulatory Analyst			
DATE 9/20/2011					



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047507900000

API: 43047507900000

Well Name: NBU 921-18M

Location: 0364 FSL 0638 FWL QTR SWSW SEC 18 TWP 090S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 10/21/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Danielle Piernot

Date: 9/20/2011

Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED Sep. 20, 2011

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
Submitted By SHEILA WOPSOCK Phone Number 435.781.7024
Well Name/Number NBU 921-18M
Qtr/Qtr SW/SW Section 18 Township 9S Range 21E
Lease Serial Number UTU-0581
API Number 4304750790

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 02/20/2012 0800 HRS AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
☐ Intermediate Casing
☐ Production Casing
☐ Liner
☐ Other

RECEIVED

FEB 17 2012

DIV. OF OIL, GAS & MINING

Date/Time 02/27/2012 0800 HRS AM ☒ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
☐ BOPE test at intermediate casing point
☐ 30 day BOPE test
☐ Other

Date/Time _____ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT
LOVEL YOUNG AT 435.781.7051 FOR MORE

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
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2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
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PHONE NUMBER: 720 929-6514		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
COUNTY: UINTAH		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 2/21/2012	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE WELL NAME	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU TRIPPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 02/21/2012 AT 1300 HRS.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 01, 2012		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 2/22/2012	

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2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 921-18M
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0364 FSL 0638 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 18 Township: 09.0S Range: 21.0E Meridian: S		9. API NUMBER: 43047507900000
PHONE NUMBER: 720 929-6514		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
COUNTY: UINTAH		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 2/28/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU AIR RIG ON FEBRUARY 26, 2012. DRILLED SURFACE HOLE TO 2,995'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 March 06, 2012**

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 3/2/2012	

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995
Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078 Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752050	MAVERICK 921-26B HZ		NWNE	26	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	18433	2/21/2012		2/29/2012		
Comments: MIRU TRIPPLE A BUCKET RIG. GRRV SPUD WELL ON 02/21/2012 AT 0800 HRS. <i>BILL SWUSE</i>							

CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750790	NBU 921-18M		SWSW	18	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	2900	2/21/2012		2/29/2012		
Comments: MIRU TRIPPLE A BUCKET RIG. WSMVD SPUD WELL ON 02/21/2012 AT 1300 HRS.							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

2/22/2012

Date

RECEIVED

FEB 27 2012

(5/2000)

Div. of Oil, Gas & Mining

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9																														
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581																														
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE																														
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES																														
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 921-18M																														
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TYPE OF SUBMISSION <input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/15/2012 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	TYPE OF ACTION <table style="width: 100%;"> <tr> <td><input type="checkbox"/> ACIDIZE</td> <td><input type="checkbox"/> ALTER CASING</td> <td><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td><input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td><input type="checkbox"/> CHANGE TUBING</td> <td><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td><input type="checkbox"/> CHANGE WELL STATUS</td> <td><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td><input checked="" type="checkbox"/> DEEPEN</td> <td><input type="checkbox"/> FRACTURE TREAT</td> <td><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td><input type="checkbox"/> OPERATOR CHANGE</td> <td><input type="checkbox"/> PLUG AND ABANDON</td> <td><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td><input type="checkbox"/> PRODUCTION START OR RESUME</td> <td><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td><input type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td><input type="checkbox"/> TUBING REPAIR</td> <td><input type="checkbox"/> VENT OR FLARE</td> <td><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td><input type="checkbox"/> WATER SHUTOFF</td> <td><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td><input type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td><input type="checkbox"/> OTHER</td> <td>OTHER: <input style="width: 100px;" type="text"/></td> </tr> </table>		<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	<input checked="" type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The operator requests approval to deepen the well to the Blackhawk formation (part of the Mesaverde Group). The Operator also requests approval for closed loop drilling option, surface casing change and production casing change. All other aspects of the previously approved drilling plan will not change. Please see the attachment. Thank you.																																
		Approved by the Utah Division of Oil, Gas and Mining Date: March 26, 2012 By:																														
NAME (PLEASE PRINT) Jaime Scharnowske		PHONE NUMBER 720 929-6304																														
SIGNATURE N/A		TITLE Regulatory Analyst																														
		DATE 3/15/2012																														

NBU 921-18M

Drilling Program
1 of 7**Kerr-McGee Oil & Gas Onshore. L.P.****NBU 921-18M**

Surface: 364 FSL / 638 FWL SWSW

Section 18 T9S R21E

Unitah County, Utah
Mineral Lease: UTU 0581**ONSHORE ORDER NO. 1****DRILLING PROGRAM**

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,706'	
Birds Nest	1,972'	Water
Mahogany	2,483'	Water
Wasatch	5,106'	Gas
Mesaverde	8,255'	Gas
Sego	10,490'	Gas
Castlegate	10,623'	Gas
Blackhawk	10,935'	Gas
TVD	11,535'	
TD	11,535'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

7. **Abnormal Conditions:**

Maximum anticipated bottom hole pressure calculated at 11535' TVD, approximately equals
7,613 psi (0.66 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 5,128 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variances:**

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

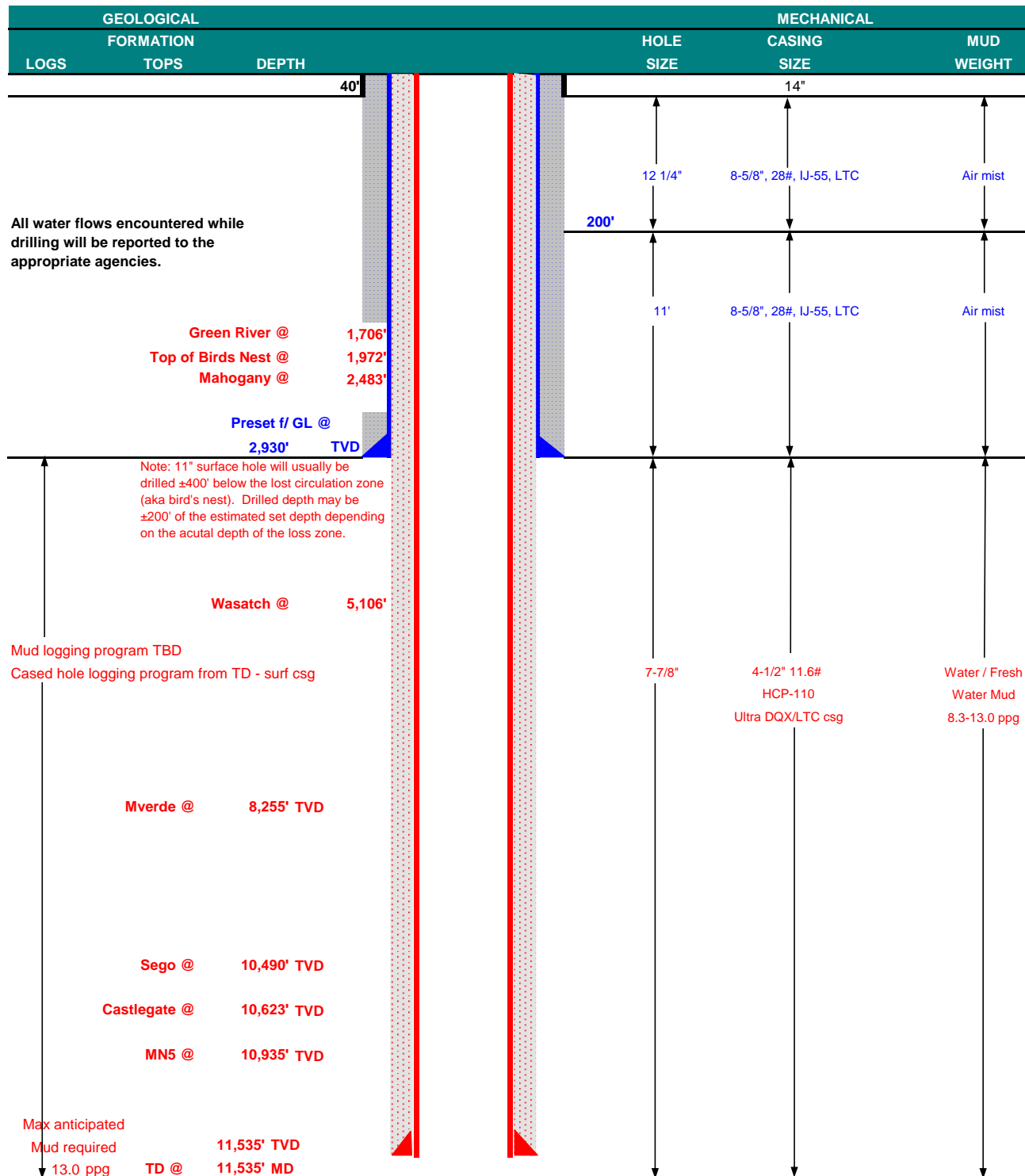
Please refer to the attached Drilling Program.

NBU 921-18M

Drilling Program
5 of 7

KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	March 15, 2012	
WELL NAME	NBU 921-18M	TD	11,535'	TVD 11,535' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE Utah
SURFACE LOCATION	SWSW 364 FSL 638 FWL	Sec 18	T 9S	R 21E
	Latitude: 40.029781	Longitude: -109.603302	NAD 83	
OBJECTIVE ZONE(S)	BLACKHAWK (Part of the Mesaverde Group)			
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BIA (Surface), UDOGM Tri-County Health Dept.			



RECEIVED: Mar. 15, 2012

NBU 921-18M

Drilling Program
6 of 7

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	DQX
CONDUCTOR	14"	0-40'							
						3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0 to 2,930	28.00	IJ-55	LTC	1.84	1.37	4.84	N/A
						10,690	8,650	279,000	367,000
PRODUCTION	4-1/2"	0 to 5,000	11.60	HCP-110	DQX	1.19	1.11		3.42
	4-1/2"	5,000 to 11,535'	11.60	HCP-110	LTC	1.19	1.11	4.59	

Surface Casing:

(Burst Assumptions: TD = 13.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.66 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	2,430'	65/35 Poz + 6% Gel + 10 pps gilsonite	220	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,605'	Premium Lite II +0.25 pps	360	35%	12.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,930'	50/50 Poz/G + 10% salt + 2% gel	1,640	35%	14.30	1.31
			+ 0.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

Nick Spence / Danny Showers / Chad Loesel

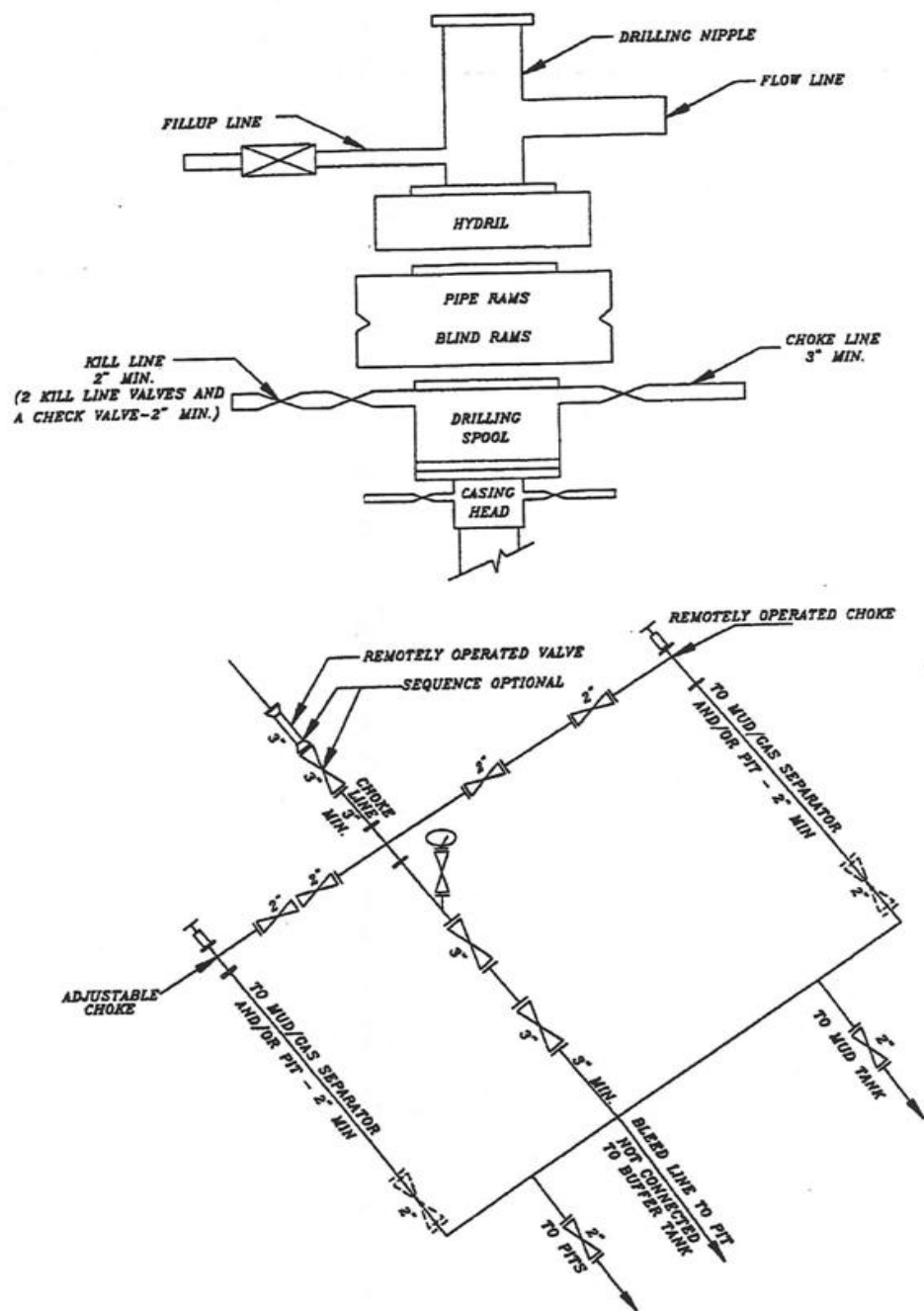
DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:

RECEIVED: Mar. 15, 2012

EXHIBIT A
NBU 921-18M**SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK**

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By STUART NEILSON Phone Number 435-790-2921
Well Name/Number NBU 921-18M
Qtr/Qtr SW SW Section 18 Township 9S Range 21E
Lease Serial Number UTU0581
API Number 4304750790

Casing – Time casing run starts, not cementing times.

- ☐ Production Casing
☐ Other

Date/Time _ _ AM ☐ PM ☐

BOPE

- ☒ Initial BOPE test at surface casing point
☐ Other

Date/Time 3/31/12 9 AM ☐ PM ☒

Rig Move

Location To:

Date/Time _ _ AM ☐ PM ☐

Remarks

RECEIVED

MAR 30 2012

DIV. OF OIL, GAS & MINING

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By STUART NEILSON Phone Number 435-790-2921
Well Name/Number NBU 921-18M
Qtr/Qtr SW SW Section 18 Township 9S Range 21E
Lease Serial Number UTU0581
API Number 4304750790

Casing – Time casing run starts, not cementing times.

☒ Production Casing
☐ Other

Date/Time 4/10/12 6 AM ☒ PM ☐

BOPE

☐ Initial BOPE test at surface casing point
☐ Other

Date/Time _ _ AM ☐ PM ☐

RECEIVED

APR 10 2012

DIV. OF OIL, GAS & MINING

Rig Move

Location To: WILL MOVE TO THE NBU 921-20C

Date/Time 4/11/12 6 AM ☐ PM ☐

Remarks _____

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By STUART NEILSON Phone Number 435-790-2921
Well Name/Number NBU 921-18M
Qtr/Qtr SW SW Section 18 Township 9S Range 21E
Lease Serial Number UTU0581
API Number 4304750790

Casing – Time casing run starts, not cementing times.

☒ Production Casing
☐ Other

Date/Time 4/10/12 6 AM ☒ PM ☐

BOPE

☐ Initial BOPE test at surface casing point
☐ Other

Date/Time _ _ AM ☐ PM ☐

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DIV. OF OIL, GAS & MINING

Rig Move

Location To: WILL MOVE TO THE NBU 921-20C

Date/Time 4/11/12 6 AM ☐ PM ☐

Remarks _____

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 921-18M
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0364 FSL 0638 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 18 Township: 09.0S Range: 21.0E Meridian: S		9. API NUMBER: 43047507900000
PHONE NUMBER: 720 929-6514		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
COUNTY: UTAH		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/11/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 MIRU ROTARY RIG. FINISHED DRILLING FROM 2995' TO 11550' ON 4/8/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED PIONEER 54 RIG ON 4/11/2012 @ 06:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 April 20, 2012

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 4/12/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU 0581
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COUNTY: UINTAH		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/7/2012	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100%;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> THE SUBJECT WELL WAS PLACED ON PRODUCTION ON DATE 5/7/2012 AT TIME 2:25 PM THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT. </div> <div style="width: 35%; text-align: center;"> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 15, 2012 </div> </div>		
NAME (PLEASE PRINT) Cara Mahler		PHONE NUMBER 720 929-6029
SIGNATURE N/A		TITLE Regulatory Analyst I
DATE 5/10/2012		

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other			5. Lease Serial No. UTU0581		
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____			6. If Indian, Allottee or Tribe Name		
2. Name of Operator KERR MCGEE OIL & GAS ONSHORE			7. Unit or CA Agreement Name and No. UTU63047A		
Contact: CARA MAHLER Mail: cara.mahler@anadarko.com			8. Lease Name and Well No. NBU 921-18M ✓		
3. Address 1099 18TH STREET, SUITE 1800 DENVER, CO 80202		3a. Phone No. (include area code) Ph: 720-929-6029		9. API Well No. 43-047-50790	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface SWSW 364FSL 638FWL 40.029781 N Lat, 109.603303 W Lon At top prod interval reported below SWSW 364FSL 638FWL 40.029781 N Lat, 109.603303 W Lon At total depth SWSW 391 FSL 683 FWL BBL by HSM			10. Field and Pool, or Exploratory NATURAL BUTTES		
14. Date Spudded 02/21/2012			15. Date T.D. Reached 04/08/2012		11. Sec., T., R., M., or Block and Survey or Area Sec 18 T9S R21E Mer SLB
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 05/07/2012			12. County or Parish UINTAH		
17. Elevations (DF, KB, RT, GL)* 4828 GL			13. State UT		
18. Total Depth: MD 11550 TVD 11547		19. Plug Back T.D.: MD 11496 TVD 11493		20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) HDL/ZDL/CNCR-BHP-CBL/CM/GR/CCL-GRR/CBL X X X X			22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis)		

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2972		570		0	
7.875	4.500 P-110	11.6	0	11540		2758		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	11021							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	8494	11375	8494 TO 11375	0.360	213	OPEN
B)						
C)						
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8494 TO 11375	PUMP 18,225 BBLs SLICK H2O & 350,660 LBS 30/50 TLC SAND; 105,913 LBS 30/50 OTTAWA SAND

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28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
05/07/2012	05/08/2012	24	→	0.0	1619.0	0.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	1371	2001.0	→	0	1619	0		PGW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #140892 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESAVERDE	1753 2040 2366 5122 8271

32. Additional remarks (include plugging procedure):

The first 210? of the surface hole was drilled with a 12 ?? bit. The remainder of surface hole was drilled with an 11? bit. DQX csg was run from surface to 5094?; LTC csg was run from 5094? to 11,540?. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7 Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #140892 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal**

Name (please print) CARA MAHLERTitle AUTHORIZED REPRESENTATIVE

Signature _____ (Electronic Submission)

Date 06/18/2012

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M				Spud Date: 2/26/2012				
Project: UTAH-UINTAH			Site: NBU 921-18M				Rig Name No: PIONEER 54/54, CAPSTAR 310/310	
Event: DRILLING			Start Date: 2/5/2012				End Date: 4/11/2012	
Active Datum: RKB @4,847.01ft (above Mean Sea Level)				UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/26/2012	6:00 - 11:30	5.50	DRLSUR	01	B	P		MOVE ON TO LOCATION, RIG UP
	11:30 - 13:30	2.00	DRLSUR	01	B	P		WELD ON ROT HEAD, RU BLOWIE LINE
	13:30 - 15:00	1.50	DRLSUR	01	B	P		SET RACKS
	15:00 - 16:00	1.00	DRLSUR	01	B	P		AIR OUT PUMPS, PU BHA
	16:00 - 17:30	1.50	DRLSUR	02	D	P		DRILL 12.25" SECTION TO 194'
	17:30 - 18:00	0.50	DRLSUR	05	C	P		CIRC
	18:00 - 18:30	0.50	DRLSUR	06	A	P		POOH , LD 12.25' BIT
	18:30 - 20:00	1.50	DRLSUR	06	A	P		PU 11.00" BIT, DIR TOOLS, TIH
	20:00 - 0:00	4.00	DRLSUR	02	D	P		DRILL F/ 194' T/ 620', WOB 20, RPM 45, UP/DWN/ROT 61/51/56, ON/OFF BTM 1150/916
2/27/2012	0:00 - 12:00	12.00	DRLSUR	02	D	P		DRILL FROM 620' TO 1883'. WOB 22, RPM 45
	12:00 - 13:00	1.00	DRLSUR	21	D	Z		NEGOTIATE COM SIGNAL WITH MWD TOOL
	13:00 - 0:00	11.00	DRLSUR	02	D	P		DRILL FROM 1883' TO 2605'. WOB 23, RPM 45, UP/DWN/ROT 108/96/102, ON/OFF BTM 1400/1105
2/28/2012	0:00 - 7:00	7.00	DRLSUR	02	D	P		DRILL FROM 2605' TO 2995'. WOB 24, RPM 45, UP/DWN/ROT 116/101/111, ON/OFF BTM 1400/1112
	7:00 - 8:00	1.00	DRLSUR	05	C	P		CIRC
	8:00 - 11:30	3.50	DRLSUR	06	A	P		POOH, REMOVE ROT RUBBER, LAY DOWN DIR TOOLS
	11:30 - 12:00	0.50	DRLSUR	12	A	P		X/O RIG UP TO RUN CASING. MOVE PIPE RACKS AND CATWALK. PULL DIVERTER HEAD. RIG UP TO RUN CSG. AND MOVE CSG INTO POSITION TO P/U.
	12:00 - 14:00	2.00	DRLSUR	12	C	P		RUN 67 JTS 8 5/8, 28# CSNG. LAND CSNG @ 14:00, SHOE SET @ 2971', BAFFLE SET @ 2925'
	14:00 - 15:00	1.00	DRLSUR	12	B	P		HOLD SAFETY MEETING, RIG UP CEMENT TRUCK, 2" HARD LINES,. CEMENT HEAD, LOAD PLUG.
	15:00 - 18:30	3.50	DRLSUR	12	E	P		PRESSURE TEST LINES TO 2500 PSI. PUMP 25 BBLs OF WATER AHEAD. PUMP 20 BBLs OF 8.3# GEL WATER AHEAD. PUMP (220 SX) 149.6 BBLs OF 11.00# 3.82 YD 23 GAL/SK PREMIUM CEMENT. PUMP 200SX (41 BBLs) OF 15.8# 1.15 YD 5 GAL/SX PREMIUM CEMENT. DROP PLUG ON FLY. DISPLACE W/ 182.5 BBLs OF H2O. FINAL LIFT OF 670 PSI AT 5 BBL/MIN. BUMP PLUG W/760 PSI HELD FOR 5 MIN. FLOAT DID HOLD. PUMP (150 SX) 30.7 BBLs OF SAME TAIL CEMENT W/ 4% CALC. DOWN 1". CEMENT TO SUFACE
	18:30 - 0:00	5.50	DRLSUR	01	A	P		RELEASE RIG AT 18:30 RIG DOWN, TRANSPORT AIR PACKAGE, PUIMPS TO NBU 921-31D1BS WELL 1 OF 3, APPROX 40% OF RIG. TRUCKS TO TRANSPORT REMAINING 60% WILL ARRIVE 0600
3/30/2012	14:00 - 0:00	10.00	DRLPRV	01	E	P		RIG DOWN ROTARY TOOL
3/31/2012	0:00 - 6:00	6.00	DRLPRV	01	E	P		RIG DOWN ROTARY TOOL, CLEAN RIG, WELD BAFFLE PLATES BACK IN GAS BUSTER

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:00 - 16:30	10.50	DRLPRV	01	A	P		HELD PRE JOB SAFETY MEETING, MOVE RIG WITH WESTROC & J & C CRANE 1.5 MILES TO THE NBU 921-18M, 5 BED TRUCKS, 2 HAUL TRUCKS, 2 FORKLIFTS, 2 SWAMPERS, 2 TRUCK PUSHERS, 1 J & C CRANE, 4 OILERS, 5 EXTRA RIG HANDS TRUCKS RELEASED @ 16:00, CRANE @ 16:30, RAISED DERRICK @ 15:30
	16:30 - 19:00	2.50	DRLPRV	01	B	P		RIG UP ROTARY TOOL
	19:00 - 20:00	1.00	DRLPRV	14	A	P		NIPPLE UP BOPE
	20:00 - 21:00	1.00	DRLPRV	14	A	P		NIPPLE UP STRATA
	21:00 - 0:00	3.00	DRLPRV	15	A	P		HELD SAFETY MEETING WITH RIG & TESTER & TEST BOPE, RAMS & ALL VALVES 250 LOW 5000 HIGH, ANN 2500, SURFACE CASING TO 1500 FOR 30 MIN.S
4/1/2012	0:00 - 1:00	1.00	DRLPRV	15	A	P		FINISH BOPE TEST
	1:00 - 2:00	1.00	DRLPRV	15	A	P		TEST STRATA MPD TO 3000 PSI, RIG DOWN TESTER
	2:00 - 2:30	0.50	DRLPRV	14	B	P		INSTALL WEAR BUSHING
	2:30 - 7:00	4.50	DRLPRV	06	A	P		HELD JOB SAFETY MEETING, RIG UP PICKUP TRUCK & PICK UP DRILL STRING, RIG DOWN
	7:00 - 8:00	1.00	DRLPRV	09	A	P		CUT & SLIP DRILL LINE, PRE-SPUD INSECTION
	8:00 - 9:30	1.50	DRLPRV	02	F	P		TAG CEMENT @ 2856', DRILL CEMENT, F/E & OPEN HOLE TO 3005', FLOAT @ 2935', SHOE @ 2984', CLOSED LOOP SYSTEM
	9:30 - 11:30	2.00	DRLPRV	02	B	P		DRILL F/ 3005' TO 3331', 326' @ 163' PH WOB /20
								RPM TOP DRIVE 60, MOTOR-135
								SPM 200 GPM 586
								MW 8.6 VIS 30
								TRQ ON/OFF = 4000-5000 K
								PSI ON /OFF 1800-1500, DIFF 100-500
								PU/SO/RT =105-95-100
								SLIDE = 0
								ROT = 100%
								STRATA - OFF LINE
								NOV- ON LINE 2- DEWATERING
								5' S & 3' W OF TARGET CENTER
								0 DRILL FLARE, 0 CONN FLARE
	11:30 - 12:00	0.50	DRLPRV	07	A	P		SERVICE RIG, BOP DRILL 77 SEC, F/T ANN & HCR VALVE

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	12:00 - 0:00	12.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 3331 TO 5010', 1679' @ 139.9' PH WOB /20-23 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.6 VIS 30 TRQ ON/OFF = 4000-6000 K PSI ON /OFF 2000-1700, DIFF 100-500 PU/SO/RT = 135-122-130 SLIDE = 30' IN .42 HRS = 71.4 ROT = 1649' IN 11.58 HRS = 142.4 STRATA - OFF LINE NOV- ON LINE 2- DEWATERING 25' S & 2.6' W OF TARGET CENTER 0 DRILL FLARE, 15' CONN FLARE
4/2/2012	0:00 - 10:30	10.50	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 5010 TO 6082', 1072' @ 102.1' PH WOB /20-23 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.7 VIS 29 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2000-1750, DIFF 100-500 PU/SO/RT = 140-130-135 SLIDE = 73' IN 1.34 HRS = 54.5' PH ROT = 999' IN 9.16 HRS = 109' PH STRATA - OFF LINE NOV- ON LINE 2- DEWATERING 15' S & 9' W OF TARGET CENTER 0 DRILL FLARE, 15' CONN FLARE
	10:30 - 11:00	0.50	DRLPRV	07	A	P		SERVICE RIG
	11:00 - 0:00	13.00	PROD	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 6082' TO 7250', 1168' @ 89.8' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2200-1900 , DIFF 100-500 PU/SO/RT = 175-150-165 SLIDE = 45' IN .83 HRS = 54.2' PH ROT = 1123' IN 12.17 HRS = 92.3' PH STRATA - OFF LINE NOV- ON LINE 2- DEWATERING 33.7 N & 22' W OF TARGET CENTER 0 DRILL FLARE, 15' CONN FLARE

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/VW/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/3/2012	0:00 - 9:00	9.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 7250' TO 7860', 610' @ 67.7' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.7 VIS 29 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2200-1900 ,DIFF 100-500 PU/SO/RT = 180-160-170 SLIDE = 10' IN .33 HRS =30.3' PH ROT = 600' IN 8.67 HRS = 69.3' PH STRATA - OFF LINE NOV- ON LINE 2- DEWATERING 59 N & 24 W OF TARGET CENTER 0 DRILL FLARE, 15' CONN FLARE REPLACE AIR LINE TO #2 PUMP THROTTLE
	9:00 - 10:00	1.00	DRLPRV	08	B	Z		
	10:00 - 14:00	4.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 7860 TO 8170', 310' @ 77.5' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.6 VIS 29 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2200-1900 , DIFF 100-500 PU/SO/RT = 185-170-165 SLIDE = 0 ROT = 100% STRATA - OFF LINE NOV- ON LINE 2- DEWATERING 65' N & 22' W OF TARGET CENTER 0 DRILL FLARE, 15' CONN FLARE SERVICE RIG, BOP DRILL 88 SEC, F/T ANN & HCR VALVE
	14:00 - 14:30	0.50	DRLPRV	07	A	P		
	14:30 - 0:00	9.50	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 8170' TO 8825', 655' @ 68.9' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.7 VIS 29 TRQ ON/OFF = 7000-5000 K PSI ON /OFF 2200-1900 , DIFF 100-500 PU/SO/RT = 200-165-185 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 8500' ANN PSI 90, CONN PSI 150 NOV- ON LINE 2- DEWATERING 71 N & 13 W OF TARGET CENTER 10" DRILL FLARE, 15' CONN FLARE

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/WW/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/4/2012	0:00 - 16:30	16.50	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 8825' TO 9782', 957' @ 58' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.7 VIS 29 TRQ ON/OFF = 8000-5000 K PSI ON /OFF 2200-1900 , DIFF 100-500 PU/SO/RT = 215-195-175 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 8500' ANN PSI 110, CONN PSI 250 NOV- ON LINE 2- DEWATERING 60' N & 2.5' W OF TARGET CENTER 15' DRILL FLARE, 25' CONN FLARE SERVICE RIG
	16:30 - 17:00	0.50	DRLPRV	07	A	P		
	17:00 - 0:00	7.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 9782' TO 10095', 313' @ 44.7' PH WOB /22-24 RPM TOP DRIVE 50, MOTOR-135 SPM 200 GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 9000-6000 K PSI ON /OFF 2500-2100 , DIFF 100-500 PU/SO/RT = 220-175-200 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 8500' ANN PSI 110, CONN PSI 250 NOV- ON LINE 2- DEWATERING 56' N & 4' E OF TARGET CENTER 15' DRILL FLARE, 25' CONN FLARE
4/5/2012	0:00 - 16:00	16.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 10,095' TO 10,636', 541' @ 33.8' PH WOB /22-24 RPM TOP DRIVE 50, MOTOR-135 SPM 200 GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 9000-6000 K PSI ON /OFF 2500-2100 , DIFF 100-500 PU/SO/RT = SLIDE = 0 ROT = 100% STRATA - ON LINE @ 8500' ANN PSI 110, CONN PSI 250 NOV- ON LINE 2- DEWATERING 47N & 16 E OF TARGET CENTER 15' DRILL FLARE, 25' CONN FLARE SERVICE RIG
	16:00 - 16:30	0.50	DRLPRV	07	A	P		

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:30 - 0:00	7.50	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 10,636' TO 10,805, 169' @ 22.5' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 9000-6000 K PSI ON /OFF 2500-2100 , DIFF 100-500 PU/SO/RT = 245-195-225 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 8500' ANN PSI 110, CONN PSI 300 NOV- ON LINE 2- CONVENTIONAL 44 N & 21 E OF TARGET CENTER 15' DRILL FLARE, 25' CONN FLARE
4/6/2012	0:00 - 4:00	4.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 10,805' TO 10,889', 94' @ 23.5' PH WOB /25-28 RPM TOP DRIVE 60, MOTOR-135 SPM 200 GPM 586 MW 8.8 VIS 31 TRQ ON/OFF = 9000-6000 K PSI ON /OFF 2500-2100 , DIFF 100-500 PU/SO/RT = 245-195-225 SLIDE = 0 ROT = 100% STRATA - ON LINE @ 8500' ANN PSI 110, CONN PSI 300 NOV- ON LINE 1- CONVENTIONAL, 1 DEWATERING 44 N & 21 E OF TARGET CENTER DRILL FLARE, CONN FLARE
	4:00 - 9:00	5.00	DRLPRV	05	G	P		DISPLACE HOLE WITH 11.6# MUD FOR TRIP
	9:00 - 13:30	4.50	DRLPRV	06	A	P		TRIP FOR NEW BIT & MOTOR, TIGHT SPOTS @ 8800', 5600', 5300', 3900', WORED ALL CLEAN, LAY DOWN BIT #1 & MUD MOTOR
	13:30 - 15:00	1.50	DRLPRV	06	A	P		PICKUP NEW BIT & MUD MOTOR, STRAIGHT MOTOR,,14 RPG TRIP IN TO SHOE
	15:00 - 15:30	0.50	DRLPRV	07	A	P		SERVICE RIG
	15:30 - 16:00	0.50	DRLPRV	09	A	P		CUT & SLIP DRIL LINE
	16:00 - 22:30	6.50	DRLPRV	06	A	P		TRIP IN HOLE, WASH TIGHT HOLE @ 5050', 5360', 6250',6600',8150',9942',
	22:30 - 0:00	1.50	DRLPRV	22	A	X		WORK STUCK PIPE @ 10,550, CAME FREE
4/7/2012	0:00 - 2:00	2.00	DRLPRV	03	A	P		WASH & REAM 400' TO BOTTOM, 15' FILL, HARD REAMING

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	2:00 - 3:30	1.50	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/10,889' TO 10,961', 72' @ 48' PH WOB /20 RPM TOP DRIVE 60, MOTOR-74 SPM 180 GPM 528 MW 11 VIS 35 TRQ ON/OFF = 9000-6000 K PSI ON /OFF 2650-2300 , DIFF 100-500 PU/SO/RT = 245-195-225 SLIDE = 0 ROT = 100% STRATA - ON OFF LINE NOV- ON LINE 1- CONVENTIONAL, 1 DEWATERING 43 N & 23 E OF TARGET CENTER 0 DRILL FLARE,15 CONN FLARE
	3:30 - 5:30	2.00	DRLPRV	22	K	Z		TROUBLESHOOT PSI LOSS, PUMP FLAG
	5:30 - 8:00	2.50	DRLPRV	06	G	Z		TRIP OUT OF HOLE LOOKING FOR HOLE IN PIPE, FOUND HOLE IN THE MIDDLE OF STAND 22 OUT, LAYDOWN BAD JT, PICKUP REPLACEMENT JT, CHECK PSI-GOOD, TRIP IN HOLE
	8:00 - 9:30	1.50	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/10,961' TO 11020', 59' @ 39.3' PH WOB /20-22 RPM TOP DRIVE 60, MOTOR-74 SPM 180 GPM 528 MW 11.2 VIS 42 TRQ ON/OFF = 10,000-8000 K PSI ON /OFF 2650-2300 , DIFF 100-500 PU/SO/RT = 245-195-225 SLIDE = 0 ROT = 100% STRATA - ON OFF LINE NOV- ON LINE 1- CONVENTIONAL, 1 DEWATERING 41 N & 26 E OF TARGET CENTER 0 DRILL FLARE,15 CONN FLARE
	9:30 - 10:00	0.50	DRLPRV	22	K	Z		CLEAN PUMP SCREENS
	10:00 - 16:00	6.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/11020' TO 11,295', 275' @ 45.8' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-74 SPM 160 GPM 468 MW 11.5 VIS 37 TRQ ON/OFF = 10,000-8000 K PSI ON /OFF 2650-2300 , DIFF 100-500 PU/SO/RT = 250-195-225 SLIDE = 0 ROT = 100% STRATA - ON OFF LINE NOV- ON LINE 1- CONVENTIONAL, 1 DEWATERING 34 N & 34E OF TARGET CENTER 0 DRILL FLARE,10 CONN FLARE
	16:00 - 16:30	0.50	DRLPRV	07	A	P		SERVICE RIG

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:30 - 0:00	7.50	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/11295' TO 11537', 242' @ 32.6' PH WOB /22-24 RPM TOP DRIVE 60, MOTOR-74 SPM 160 GPM 468 MW 11.9 VIS 45, 2% LCM BYPASS SHAKERS RAISE LCM TRQ ON/OFF = 10,000-8000 K PSI ON /OFF 2650-2300 , DIFF 100-500 PU/SO/RT = 250-175-225 SLIDE = 0 ROT = 100% STRATA - ON LINE ANN PSI 110, CONN 300 NOV- ON LINE 1- CONVENTIONAL, 1 DEWATERING 30 N & 40 E OF TARGET CENTER 0 DRILL FLARE,15 CONN FLARE
4/8/2012	0:00 - 1:00	1.00	DRLPRV	02	B	P		CLOSED LOOP SYSTEM DRILL F/ 11537' TO 11550' TD , 13' @ 13' PH WOB /25 RPM TOP DRIVE 60, MOTOR-74 SPM 120 GPM 352 MW 11.9 VIS 45, 10% LCM BYPASS SHAKERS RAISE LCM TO 10% TRQ ON/OFF = 10,000-8000 K PSI ON /OFF 1800-1500 , DIFF 100-500 PU/SO/RT = 250-175-225 SLIDE = 0 ROT = 100% STRATA - ON LINE ANN PSI 150, CONN 300 NOV- ON LINE 1- CONVENTIONAL, 1 DEWATERING 26.32 N & 44.07 E OF TARGET CENTER RAISE MW & LCM
	1:00 - 2:00	1.00	DRLPRV	05	B	S		
	2:00 - 6:00	4.00	DRLPRV	21	E	Z		WAIT ON BAR THAT WAS ORDERED 8 HRS IN ADVANCE, SHOWED UP IN 4 HRS LATE (1 LOAD OF SACK BAR + TRUCKING NO CHARGE)
	6:00 - 12:00	6.00	DRLPRV	05	B	P		RAISE MW TO 13# & LCM TO 10% CONTROL WELL BORE, GAS & WATER FLOW
	12:00 - 17:30	5.50	DRLPRV	06	E	P		TRIP OUT TO SHOE, TRIP IN, NO PROBLEMS
	17:30 - 18:00	0.50	DRLPRV	07	A	P		SERVICE RIG
	18:00 - 20:30	2.50	DRLPRV	05	C	P		MAINTAIN 13# MUD IN, 50 MIN INTO CIRC 35' FLARE WITH WATER FOR 20 MIN, 12.2# OUT, 13# IN & OUT, PUMP PILL, NO FLARE
	20:30 - 0:00	3.50	DRLPRV	06	B	P		TRIP OUT FOR OPEN HOLE LOGS
4/9/2012	0:00 - 1:30	1.50	DRLPRV	06	A	P		TRIP OUT, LAYDOWN DIR TOOLS
	1:30 - 6:30	5.00	DRLPRV	11	C	P		HELD SAFETY MEETING, RIG UP & RUN OPEN HOLE LOGS TO 5450, HIT BRIDGE, LOG OUT, RIG DOWN
	6:30 - 13:30	7.00	DRLPRV	06	E	P		PICKUP CONE BIT, TRIP IN HOLE, REAM TIGHT HOLE @ 5450,5620, 6000, 6300,10,100', PICK UP 4 JTS TO MAKE UP FOR DIR TOOLS,
	13:30 - 15:00	1.50	DRLPRV	05	C	P		CIRC OUT GAS & WATER TO LAYDOWN DRILL STRING
	15:00 - 22:00	7.00	DRLPRV	06	B	P		LAYDOWN DRILL STRING

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: PIONEER 54/54, CAPSTAR 310/310

Event: DRILLING

Start Date: 2/5/2012

End Date: 4/11/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/10/2012	22:00 - 0:00	2.00	DRLPRV	11	C	P		HELD SAFETY MEETING, RIGUP & RUN OPENHOLE LOGS TO 11,530', LOG OUT
	0:00 - 5:30	5.50	DRLPRV	11	C	P		RUN OPEN HOLE LOGS TO 11,530, DRILLER'S TD 11,550, RIG DOWN
	5:30 - 6:00	0.50	DRLPRV	14	B	P		PULL WEAR BUSHING
	6:00 - 8:30	2.50	DRLPRV	21	D	Z		WAIT ON NEW FASTLINE FOR PICKUP CREW TRUCK
	8:30 - 19:00	10.50	DRLPRV	12	C	P		HELD PRE-JOB SAFETY MEETING WITH RIG & CASING CREWS, RIG UP & RUN 151JTS 4.5" LTC + 2 MARKERS, 121 JTS 4.5" DQX PROD CASING + 1 X/O, SHOE @ 11,540, FLOAT @ 11,496, B/H MARKER @ 10,943, MESA MARKER @ 8252', X/O @ 5,093
	19:00 - 20:30	1.50	DRLPRV	05	D	P		CIRC OUT GAS TO CEMENT PROD CASING, 30' FLARE FOR 30 MIN, WATER 20' FOR 10 MIN
	20:30 - 0:00	3.50	DRLPRV	12	E	P		HELD PRE JOB SAFETY MEETING WITH RIG & CEMENTERS, TEST LINES TO 5732 PSI, DROP BOTTOM PLUG, PUMP 25 BBL WATER SPACER, LEAD 783 SACK 13.5 PPG 1.6 YLD, TAIL 1975 SACKS 14.3 PPG 1.32 YLD W .5% EC 1, DROP PLUG & DISPLACE WITH 178.7 BBLS CLAYCARE WATER, LOST RETURNS 120 BBLS INTO DISPLACEMENT, BUMPED PLUG @ 4127 FINAL LIFT BEFORE BUMP 3771 PSI, FLOATS HELD WITH 2.5 BBLS BACK TO TRUCK, EST TOP OF CEMENT 3600', PLUG BACK TO 11,496'
4/11/2012	0:00 - 1:00	1.00	DRLPRV	12	E	P		FINISH CEMENTING
	1:00 - 2:00	1.00	DRLPRV	14	B	P		FLUSH STACK, SET C-22 SLIPS WITH 125 K, MAKE ROUGH CUT
	2:00 - 6:00	4.00	DRLPRV	14	A	P		NIPPLE DOWN, CLEAN PITS & RELEASE RIG TO THE NBU 921-20C @ 06:00

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-18M	Wellbore No.	OH
Well Name	NBU 921-18M	Wellbore Name	NBU 921-18M
Report No.	1	Report Date	4/20/2012
Project	UTAH-UINTAH	Site	NBU 921-18M
Rig Name/No.		Event	COMPLETION
Start Date	4/20/2012	End Date	5/7/2012
Spud Date	2/26/2012	Active Datum	RKB @4,847.01ft (above Mean Sea Level)
UWI	SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0		

1.3 General

Contractor	CASED HOLE	Job Method		Supervisor	STEVE WALL, SR.
Perforated Assembly	PRODUCTION CASING	Conveyed Method			

1.4 Initial Conditions

Fluid Type		Fluid Density		Gross Interval	8,494.0 (ft)-11,375.0 (ft)	Start Date/Time	5/2/2012 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	44	End Date/Time	5/3/2012 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	213	Net Perforation Interval	69.00 (ft)
Hydrostatic Press		Press Difference		Avg Shot Density	3.09 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

1.5 Summary

2 Intervals

2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/3/2012 12:00AM	MESAVERDE/			8,494.0	8,495.0	4.00		0.360	EXP/	3.375	90.00			23.00 PRODUCTION	

2.1 Perforated Interval (Continued)

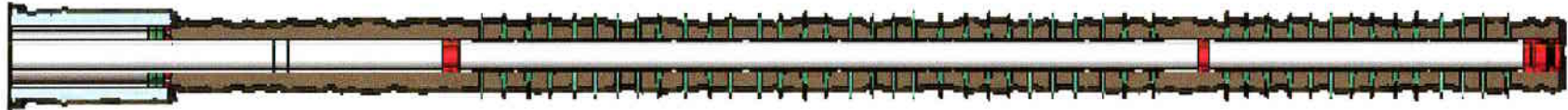
Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/3/2012 12:00AM	MESAVERDE/			8,522.0	8,523.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,606.0	8,607.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,647.0	8,648.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,720.0	8,721.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,735.0	8,736.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,785.0	8,786.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,795.0	8,796.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,813.0	8,814.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			8,936.0	8,937.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,010.0	9,012.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,037.0	9,039.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,220.0	9,222.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,242.0	9,244.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,298.0	9,300.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,340.0	9,342.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,422.0	9,424.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,457.0	9,458.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,470.0	9,471.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,484.0	9,486.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,602.0	9,604.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,700.0	9,702.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/3/2012 12:00AM	MESAVERDE/			9,740.0	9,741.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,759.0	9,760.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,776.0	9,778.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,820.0	9,821.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/3/2012 12:00AM	MESAVERDE/			9,868.0	9,869.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			10,010.0	10,012.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			10,044.0	10,046.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			10,229.0	10,233.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			10,988.0	10,989.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,000.0	11,002.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,010.0	11,014.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,056.0	11,057.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,070.0	11,071.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,089.0	11,090.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,098.0	11,100.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,106.0	11,107.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,153.0	11,154.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,164.0	11,166.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,272.0	11,274.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,287.0	11,289.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
5/2/2012 12:00AM	MESAVERDE/			11,298.0	11,300.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/2/2012 12:00AM	MESAVERDE/			11,374.0	11,375.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots**3.1 Wellbore Schematic**

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M		Spud Date: 2/26/2012	
Project: UTAH-UINTAH	Site: NBU 921-18M		Rig Name No: SWABBCO 8/8
Event: COMPLETION	Start Date: 4/20/2012		End Date: 5/7/2012
Active Datum: RKB @4,847.01ft (above Mean Sea Level)		UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/17/2012	8:00 - 11:00	3.00	COMP	33	D	P		HOOK UP ACTION HOT OIL TO SURFACE CSG, 10 BBLs TO FILL, PUMP INTO @ 2 1/4 BBLs @ 250 PSI, PUMPED 6 BBLs
4/20/2012	8:00 - 11:00	3.00	COMP	51	B	Z		MIRU, HALIBURTON, PSI TEST PUMP LINES TO 1000 PSI, EST INJ RATE, 2.5 BBLs @ 500 PSI, PUMP 10 BBLs SUPER FLUSH, 590 SKS, 12.5# SQUEEZECEM, 2.26 YLD, MAX PSI 515#, 3 BBLs FLUSH, ISIP 210#.
4/21/2012	-							
4/22/2012	-							
4/23/2012	-							
4/24/2012	13:00 - 15:30	2.50	COMP	33		P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 12 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 36 PSI. 1ST PSI TEST T/ 9000 PSI. HELD FOR 30 MIN LOST 146 PSI. 2ND PSI TEST T/ 9000 PSI. HELD FOR 30 MIN. LOST 102 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. SWFBN NOTE : TOOK 15 BLLS TO FILL SURFACE
4/27/2012	7:00 - 15:00	8.00	DRLOUT	30	A	P		RDMO BONANZA 1023-5G2AS, MOVE IN SPOT RIG & EQUIPMENT, TO WINDY TO RIG UP. SDFWE
4/30/2012	7:00 - 7:30	0.50	COMP	48		P		HSM, RIGGING UP RIG & EQUIP.
	7:30 - 15:00	7.50	COMP	31	I	P		RIG UP RIG, ND WH NU BOPS, RU FLOOR & EQUIP. TALLY & PU 37/8 BIT & 266 JTS 23/8 L-80, EOT @ 8427', SWI SDFN.
5/1/2012	7:00 - 7:30	0.50	COMP	48		P		HSM, TRIPPING TBG & WATCHING PINCH POINTS.
	7:30 - 15:00	7.50	COMP	31	I	P		SICP 0, POOH W/ 266 JTS 23/8 L-80 L/D BIT. ND BOPS NU FV, RU B&C INSTALLED HANGER TEST FRAC VALVE TO 9000 PSI FOR 10 MIN. GOOD TEST, RD B&C, PREP TO 1ST SHOT & START FRACING IN AM.
5/2/2012	7:00 - 8:30	1.50	COMP	34	H	P		HSM, WORKING W/ WIRE LINE & FRAC CREW, RU CASED HOLE RIH W/ 31/8 23 GRM, .36" HLS EXP GUNS, 120 & 90 DEG PHASING, PERF 1ST STG AS OF PROCEDURE.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: SWABBCO 8/8

Event: COMPLETION

Start Date: 4/20/2012

End Date: 5/7/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:30 - 10:34	2.07	COMP	36	E	P		PRIME PUMPS & LINES TEST LINES TO 9500 PSI, SET POPOFF @ 8800 PSI, SET KILLS ON 3 TRK @ 8800 PSI 3 @ 7700 PSI. (STG # 1) WHP 616 PSI, BRK 4185 PSI @ 5.6 BPM. ISIP 3622 PSI, FG .76. SPOT ACID ON PERFS LET SOAK FOR 5 MINS. CALC HOLES OPEN @ 51.7 BPM @ 6851 PSI = 100% HOLES OPEN. MP 7416 PSI, MR 52.3 BPM, AP 6350 PSI, AR 51.9 BPM ISIP 3602 PSI, FG .76 NPI -20 PSI. (STG # 2) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 11,196', PERF WELL AS OF PROCEDURE. WHP 2600 PSI, BRK 3951 PSI @ 4.2 BPM. ISIP 3442 PSI, FG .75. CALC HOLES OPEN @ 50.6 BPM @ 5661 PSI = 100% HOLES OPEN. MP 7012 PSI, MR 52.0 BPM, AP 5849 PSI, AR 50.3 BPM ISIP 3607 PSI, FG .76 NPI 165 PSI. (STG # 3) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 & 90 DEG PHASING, SET CBP @ 11,044', PERF WELL AS OF PROCEDURE. WHP 2984 PSI, BRK 4332 PSI @ 4.0 BPM. ISIP 3686 PSI, FG .77. CALC HOLES OPEN @ 50.7 BPM @ 6437 PSI = 100% HOLES OPEN. MP 8116 PSI, MR 51.2 BPM, AP 6590 PSI, AR 50.4 BPM ISIP 3569 PSI, FG .76 NPI -117 PSI. (STG # 4) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 10,263', PERF WELL AS OF PROCEDURE. POOH SW SDFN. HSM W/ SUPERIOR. (STG # 4) WHP 2174 PSI, BRK 3694 PSI @ 4.4 BPM. ISIP 3152 PSI, FG .75. CALC HOLES OPEN @ 46.4 BPM @ 5727 PSI = 96% HOLES OPEN. MP 6982 PSI, MR 56.0 BPM, AP 5531 PSI, AR 54.6 BPM ISIP 3232 PSI, FG .76 NPI 80 PSI. (STG # 5) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 9899', PERF WELL AS OF PROCEDURE. WHP 968 PSI, BRK 3159 PSI @ 4.4 BPM. ISIP 2669 PSI, FG .71. CALC HOLES OPEN @ 51.9 BPM @ 6071 PSI = 85% HOLES OPEN. MP 5322 PSI, MR 52.4 BPM, AP 5227 PSI, AR 52.1 BPM ISIP 3050 PSI, FG .75 NPI 381 PSI.
	10:34 - 14:32	3.97	COMP	36	E	P		
	14:32 - 17:21	2.82	COMP	36	E	P		
	17:21 - 19:00	1.65	COMP	37	B	P		
5/3/2012	6:30 - 6:51	0.35	COMP	36	E	P		
	6:51 - 8:24	1.55	COMP	36	E	P		

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: SWABBCO 8/8

Event: COMPLETION

Start Date: 4/20/2012

End Date: 5/7/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:24 - 9:49	1.42	COMP	36	E	P		(STG # 6) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 9634', PERF WELL AS OF PROCEDURE. WHP 2693 PSI, BRK 3322 PSI @ 4.1 BPM. ISIP 2839 PSI, FG .74. CALC HOLES OPEN @ 52.0 BPM @ 5797 PSI = 98% HOLES OPEN. MP 5857 PSI, MR 52.2 BPM, AP 5039 PSI, AR 51.9 BPM ISIP 2930 PSI, FG .75 NPI 91 PSI.
	9:49 - 11:08	1.32	COMP	36	E	P		(STG # 7) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 9372', PERF WELL AS OF PROCEDURE. WHP 1648 PSI, BRK 3585 PSI @ 4.3 BPM. ISIP 2627 PSI, FG .72. CALC HOLES OPEN @ 52.0 BPM @ 5488 PSI = 100% HOLES OPEN. MP 7323 PSI, MR 52.3 BPM, AP 5226 PSI, AR 52.0 BPM ISIP 3093 PSI, FG .77 NPI 466 PSI.
	11:08 - 14:25	3.28	COMP	36	E	P		(STG # 8) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 DEG PHASING, SET CBP @ 9069', PERF WELL AS OF PROCEDURE. POOH, HAD STEM PACKING IN SIDE VALVE ON FV WASH OUT, SHUT WELL B&C REPAIRED VALVE. OPEN WELL @ 14:02, 3 HRS. WHP 1875 PSI, BRK 2415 PSI @ 3.9 BPM. ISIP 2129 PSI, FG .68. CALC HOLES OPEN @ 52.2 BPM @ 5463 PSI = 84% HOLES OPEN. MP 5617 PSI, MR 53.0 BPM, AP 4878 PSI, AR 51.7 BPM ISIP 2829 PSI, FG .76 NPI 700 PSI.
	14:25 - 16:03	1.63	COMP	36	E	P		(STG # 9) PU 41/2 HAL 8-K CBP & 31/8 EXP 23 GRM .36" HLS, 120 & 90 DEG PHASING, SET CBP @ 8752', PERF WELL AS OF PROCEDURE. WHP 1441 PSI, BRK 2548 PSI @ 4.0 BPM. ISIP 1868 PSI, FG .66. CALC HOLES OPEN @ 50.4 BPM @ 4314 PSI = 100% HOLES OPEN. MP 4482 PSI, MR 50.6 BPM, AP 4134 PSI, AR 52.2 BPM ISIP 2819 PSI, FG .77 NPI 951 PSI.
	16:03 - 18:00	1.95	COMP	34	I	P		TOTAL 30/50 TLC 350,660 LBS TOTAL 30/50 OTTAWA 105,913 LBS TOTAL WATER 18,225 BBLS TOTAL SCALE INH 430 GALS TOTAL BIOCID 179 GALS DEISEL 3513 GALS
5/4/2012	7:00 - 7:30	0.50	COMP	48		P		(KILL PLUG) RIH SET 41/2 8-K CBP @ 8444', POOH SVM RD WL & FRAC CREW SVM SDFN. HSM, NIPPLE DWN FV NU BOPS.

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M				Spud Date: 2/26/2012					
Project: UTAH-UINTAH			Site: NBU 921-18M				Rig Name No: SWABBCO 8/8		
Event: COMPLETION			Start Date: 4/20/2012			End Date: 5/7/2012			
Active Datum: RKB @4,847.01ft (above Mean Sea Level)				UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation	
	7:30 - 15:00	7.50	COMP	31	I	P		SICP 0, ND FV, NI BOPS, RU FLOOR & EQUIP. RIH W/ 37/8 BIT, POBS, 1,875 X/N & 266 JTS 23/8 L-80 TO KILL PLUG. RU DRLG EQUIP, BROKE CIRC CONV TEST BOPS TO 4000 PSI, PREP TO D/O 5/7/12. SWI SDFWE	
5/7/2012	7:00 - 7:30	0.50	COMP	48		P		HSM, DRILLING OUT CBPS, WATCH FLOW LINES FOR LEAKS.	

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M

Spud Date: 2/26/2012

Project: UTAH-UINTAH

Site: NBU 921-18M

Rig Name No: SWABBCO 8/8

Event: COMPLETION

Start Date: 4/20/2012

End Date: 5/7/2012

Active Datum: RKB @4,847.01ft (above Mean Sea Level)

UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/VW/0/638/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 17:30	10.00	COMP	44	C	P		<p>BROKE CIRC CONV, RIH.</p> <p>C/O 5' SAND TAG 1ST PLUG @ 8444' DRL PLG IN 4 MIN, 1100# PSI INCREASE RIH.</p> <p>C/O 30' SAND TAG 2ND PLUG @ 8752' DRL PLG IN 5 MIN, 100# PSI INCREASE RIH.</p> <p>C/O 25' SAND TAG 3RD PLUG @ 9069' DRL PLG IN 7 MIN, 800# PSI INCREASE RIH.</p> <p>C/O 15' SAND TAG 4TH PLUG @ 9372' DRL PLG IN 2 MIN, 900# PSI INCREASE RIH</p> <p>C/O 25' SAND TAG 5TH PLUG @ 9639' DRL PLG IN 6 MIN, 500# PSI INCREASE RIH</p> <p>C/O 25' SAND TAG 6TH PLUG @ 9899' DRL PLG IN 6 MIN, 1000# PSI INCREASE RIH</p> <p>C/O 20' SAND TAG 7TH PLUG @ 10,263' DRL PLG IN 4 MIN, 500# PSI INCREASE RIH</p> <p>C/O 30' SAND TAG 8TH PLUG @ 11,044' DRL PLG IN 5 MIN, 400# PSI INCREASE RIH</p> <p>C/O 30' SAND TAG 9TH PLUG @ 11,196' DRL PLG IN 8 MIN, 500# PSI INCREASE RIH</p> <p>C/O TO 11,495', CIRC CLN, L/D 14 JTS. LAND TBG ON 347 JTS 23/8 L-80. ND BOPS NU WH, TEST FLOW LINE TO 4,000 PSI, PUMP OFF BIT, TURN WELL OVER TO FB CREW. RDMOL, MOVE TO NBU 921-26M PAD SPOT EQUIP SDFN.</p> <p>KB= 19' (SURFOPEN W/ POPOFF)</p> <p>HANGER = .83' SICP 2750</p> <p>PSI, FTP 100 PSI</p> <p>347 JTS 23/8 L-80 = 10,999.19'</p> <p>POBS W/ 1.875 X/N = 2.20'</p> <p>EOT @ 11,021.22'</p> <p>TWTR 18,495 BBLS</p> <p>TWR 1500 BBLS</p> <p>TWLTR 16,995 BBLS</p> <p>371 JTS IN WELL</p> <p>347 LANDED</p> <p>24 TO RETURN</p> <p>WELL TURNED TO SALES @ 14:25 HR, ON 5/7/2012- 600 MCFD, 2040 BWPD, FCP 2880#, FTP 2230#, 20/64"</p>
	14:25 - 15:00	0.58	COMP	50				

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-18M				Spud Date: 2/26/2012				
Project: UTAH-UINTAH			Site: NBU 921-18M			Rig Name No: SWABBCO 8/8		
Event: COMPLETION			Start Date: 4/20/2012		End Date: 5/7/2012			
Active Datum: RKB @4,847.01ft (above Mean Sea Level)				UWI: SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638/0/0				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
5/13/2012	7:00 -			50				WELL IP'D ON 5/13/12 - 3163 MCFD, 0 BOPD, 700 BWPD, CP 3319#, FTP 2405#, CK 20/64, LP 281#, 24 HRS

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 921-18M	Wellbore No.	OH
Well Name	NBU 921-18M	Common Name	NBU 921-18M
Project	UTAH-UINTAH	Site	NBU 921-18M
Vertical Section Azimuth	0.00 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	2/26/2012	UWI	SW/SW/0/9/S/21/E/18/0/0/26/PM/S/364/W/0/638 /0/0
Active Datum	RKB @4,847.01ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	Anadarko Petroleum Corp
Started	2/26/2012	Ended	
Tool Name		Engineer	Anadarko Employee

2.1.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
10.00	0.00	0.00	10.00	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Bulld (°/100ft)	Turn (°/100ft)	TFace (°)
2/26/2012	Tie On	10.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2/26/2012	NORMAL	242.00	0.21	152.71	242.00	-0.38	0.19	-0.38	0.09	0.09	0.00	152.71
	NORMAL	333.00	0.53	176.00	333.00	-0.95	0.30	-0.95	0.38	0.35	25.59	37.13
	NORMAL	423.00	0.59	139.13	422.99	-1.71	0.63	-1.71	0.40	0.07	-40.97	-99.30
	NORMAL	517.00	0.38	336.32	516.99	-1.79	0.82	-1.79	1.02	-0.22	-173.20	-173.28
	NORMAL	610.00	0.35	355.39	609.99	-1.23	0.68	-1.23	0.13	-0.03	20.51	113.28
2/27/2012	NORMAL	705.00	0.53	12.09	704.99	-0.51	0.75	-0.51	0.23	0.19	17.58	44.01
	NORMAL	799.00	0.26	260.47	798.99	-0.12	0.63	-0.12	0.71	-0.29	-118.74	-158.88
	NORMAL	893.00	0.44	275.14	892.99	-0.12	0.06	-0.12	0.21	0.19	15.61	33.93
	NORMAL	987.00	0.62	274.18	986.98	-0.05	-0.81	-0.05	0.19	0.19	-1.02	-3.30
	NORMAL	1,080.00	0.70	252.73	1,079.98	-0.18	-1.85	-0.18	0.28	0.09	-23.06	-82.98
	NORMAL	1,173.00	0.18	113.07	1,172.97	-0.41	-2.26	-0.41	0.91	-0.56	-150.17	-172.08
	NORMAL	1,267.00	0.79	94.88	1,266.97	-0.52	-1.48	-0.52	0.66	0.65	-19.35	-23.38
	NORMAL	1,361.00	0.70	76.16	1,360.96	-0.44	-0.28	-0.44	0.27	-0.10	-19.91	-119.49
	NORMAL	1,456.00	0.26	125.64	1,455.96	-0.43	0.46	-0.43	0.60	-0.46	52.08	159.59
	NORMAL	1,551.00	0.44	211.42	1,550.96	-0.86	0.45	-0.86	0.52	0.19	90.29	117.42
	NORMAL	1,647.00	0.53	213.45	1,646.96	-1.55	0.01	-1.55	0.10	0.09	2.11	11.83
	NORMAL	1,742.00	0.88	231.73	1,741.95	-2.37	-0.81	-2.37	0.43	0.37	19.24	42.09
	NORMAL	1,838.00	0.88	254.93	1,837.94	-3.02	-2.10	-3.02	0.37	0.00	24.17	101.60

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
2/27/2012	NORMAL	1,931.00	0.26	322.08	1,930.93	-3.03	-2.92	-3.03	0.88	-0.67	72.20	162.90
	NORMAL	2,025.00	0.62	40.74	2,024.93	-2.48	-2.71	-2.48	0.66	0.38	83.68	102.80
	NORMAL	2,120.00	0.62	9.19	2,119.93	-1.58	-2.30	-1.58	0.35	0.00	-33.21	-105.77
	NORMAL	2,213.00	0.69	28.72	2,212.92	-0.60	-1.95	-0.60	0.25	0.08	21.00	82.52
	NORMAL	2,309.00	0.62	69.04	2,308.92	0.10	-1.18	0.10	0.48	-0.07	42.00	118.44
	NORMAL	2,404.00	0.35	85.74	2,403.91	0.30	-0.42	0.30	0.32	-0.28	17.58	160.55
2/28/2012	NORMAL	2,498.01	0.62	107.62	2,497.91	0.17	0.36	0.17	0.34	0.29	23.28	45.72
	NORMAL	2,594.01	0.18	123.18	2,593.91	-0.07	0.98	-0.07	0.47	-0.46	16.21	173.83
	NORMAL	2,688.01	0.09	174.25	2,687.91	-0.22	1.11	-0.22	0.15	-0.10	54.33	150.44
	NORMAL	2,781.01	0.87	266.61	2,780.90	-0.34	0.41	-0.34	0.94	0.84	99.31	98.24
	NORMAL	2,874.01	0.97	235.68	2,873.89	-0.82	-0.94	-0.82	0.54	0.11	-33.26	-94.35
	NORMAL	2,950.01	0.53	215.38	2,949.89	-1.47	-1.68	-1.47	0.67	-0.58	-26.71	-158.75

2.2 Survey Name: Survey #2

Survey Name	Survey #2	Company	Anadarko Petroleum Corp
Started	3/30/2012	Ended	
Tool Name		Engineer	Anadarko Employee

2.2.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
2,950.01	0.53	215.38	2,949.89	-1.47	-1.68

2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
3/30/2012	Tie On	2,950.01	0.53	215.38	2,949.89	-1.47	-1.68	-1.47	0.00	0.00	0.00	0.00
4/1/2012	NORMAL	3,086.01	0.36	218.64	3,085.88	-2.32	-2.31	-2.32	0.13	-0.12	2.40	173.16
	NORMAL	3,181.01	0.93	192.41	3,180.88	-3.31	-2.66	-3.31	0.66	0.60	-27.61	-40.92
	NORMAL	3,276.01	0.70	186.73	3,275.87	-4.64	-2.90	-4.64	0.26	-0.24	-5.98	-163.47
	NORMAL	3,371.01	1.06	194.73	3,370.85	-6.06	-3.19	-6.06	0.40	0.38	8.42	22.87
	NORMAL	3,465.01	1.23	192.94	3,464.84	-7.89	-3.63	-7.89	0.18	0.18	-1.90	-12.78
	NORMAL	3,560.01	0.07	184.48	3,559.83	-8.94	-3.87	-8.94	1.22	-1.22	-8.91	-179.49
	NORMAL	3,655.01	0.18	160.45	3,654.83	-9.14	-3.82	-9.14	0.13	0.12	-25.29	-37.83
	NORMAL	3,750.01	0.79	156.24	3,749.82	-9.88	-3.51	-9.88	0.64	0.64	-4.43	-5.45
	NORMAL	3,844.01	0.79	171.97	3,843.82	-11.11	-3.16	-11.11	0.23	0.00	16.73	97.86
	NORMAL	3,939.01	0.62	180.07	3,938.81	-12.27	-3.07	-12.27	0.21	-0.18	8.53	153.63
	NORMAL	4,034.01	0.70	162.74	4,033.80	-13.34	-2.89	-13.34	0.23	0.08	-18.24	-76.98
	NORMAL	4,129.01	0.88	169.51	4,128.79	-14.61	-2.59	-14.61	0.21	0.19	7.13	30.82
	NORMAL	4,224.01	1.14	177.94	4,223.78	-16.28	-2.42	-16.28	0.31	0.27	8.87	34.01
	NORMAL	4,319.01	1.58	172.06	4,318.75	-18.52	-2.21	-18.52	0.49	0.46	-6.19	-20.55
	NORMAL	4,414.01	0.70	290.71	4,413.74	-19.61	-2.57	-19.61	2.12	-0.93	124.89	162.22
	NORMAL	4,509.01	0.26	179.17	4,508.74	-19.62	-3.11	-19.62	0.88	-0.46	-117.41	-163.09
	NORMAL	4,604.01	0.35	175.04	4,603.74	-20.12	-3.08	-20.12	0.10	0.09	-4.35	-15.80
	NORMAL	4,698.01	0.53	183.13	4,697.74	-20.84	-3.08	-20.84	0.20	0.19	8.61	23.12
	NORMAL	4,793.01	0.79	183.66	4,792.73	-21.94	-3.15	-21.94	0.27	0.27	0.56	1.61
	NORMAL	4,888.01	1.32	168.89	4,887.71	-23.66	-2.98	-23.66	0.62	0.56	-15.55	-34.68
	NORMAL	4,983.01	1.32	173.29	4,982.69	-25.82	-2.64	-25.82	0.11	0.00	4.63	92.20
4/2/2012	NORMAL	5,078.01	0.35	202.20	5,077.68	-27.18	-2.62	-27.18	1.08	-1.02	30.43	170.52
	NORMAL	5,173.01	0.62	172.23	5,172.67	-27.96	-2.66	-27.96	0.38	0.28	-31.55	-58.86
	NORMAL	5,267.01	0.44	169.16	5,266.67	-28.82	-2.52	-28.82	0.19	-0.19	-3.27	-172.57
	NORMAL	5,362.01	0.53	326.92	5,361.67	-28.81	-2.69	-28.81	1.00	0.09	166.06	167.83
	NORMAL	5,457.01	1.32	325.07	5,456.66	-27.54	-3.56	-27.54	0.83	0.83	-1.95	-3.09

2.2.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/2/2012	NORMAL	5,552.01	1.76	330.87	5,551.62	-25.37	-4.90	-25.37	0.49	0.46	6.11	22.42
	NORMAL	5,647.01	1.41	339.93	5,646.59	-23.00	-6.01	-23.00	0.45	-0.37	9.54	148.87
	NORMAL	5,742.01	1.18	338.78	5,741.56	-20.99	-6.76	-20.99	0.24	-0.24	-1.21	-174.13
	NORMAL	5,838.01	1.86	328.14	5,837.53	-18.74	-7.94	-18.74	0.76	0.71	-11.08	-27.92
	NORMAL	5,932.01	2.73	347.31	5,931.45	-15.26	-9.24	-15.26	1.22	0.93	20.39	51.27
	NORMAL	6,027.01	2.63	341.74	6,026.35	-10.99	-10.42	-10.99	0.29	-0.11	-5.86	-113.77
	NORMAL	6,122.01	1.79	343.88	6,121.28	-7.49	-11.52	-7.49	0.89	-0.88	2.25	175.46
	NORMAL	6,217.01	1.76	336.24	6,216.23	-4.73	-12.52	-4.73	0.25	-0.03	-8.04	-101.03
	NORMAL	6,312.01	2.55	347.57	6,311.17	-1.33	-13.56	-1.33	0.94	0.83	11.93	34.08
	NORMAL	6,407.01	2.55	348.10	6,406.07	2.80	-14.45	2.80	0.02	0.00	0.56	90.26
	NORMAL	6,502.01	2.22	345.03	6,500.99	6.65	-15.36	6.65	0.37	-0.35	-3.23	-160.37
	NORMAL	6,598.01	1.77	352.03	6,596.93	9.91	-16.05	9.91	0.53	-0.47	7.29	155.03
	NORMAL	6,693.01	2.64	335.97	6,691.86	13.36	-17.14	13.36	1.11	0.92	-16.91	-43.59
	NORMAL	6,787.01	2.20	339.49	6,785.78	17.03	-18.65	17.03	0.49	-0.47	3.74	163.09
	NORMAL	6,882.01	2.11	343.71	6,880.71	20.42	-19.78	20.42	0.19	-0.09	4.44	121.66
	NORMAL	6,977.01	3.08	352.06	6,975.61	24.62	-20.63	24.62	1.09	1.02	8.79	25.50
4/3/2012	NORMAL	7,072.01	2.73	348.54	7,070.49	29.37	-21.43	29.37	0.41	-0.37	-3.71	-154.74
	NORMAL	7,167.01	2.55	354.54	7,165.39	33.69	-22.08	33.69	0.35	-0.19	6.32	126.05
	NORMAL	7,262.01	2.11	352.32	7,260.31	37.53	-22.51	37.53	0.47	-0.46	-2.34	-169.52
	NORMAL	7,356.01	1.85	347.92	7,354.26	40.72	-23.06	40.72	0.32	-0.28	-4.68	-151.87
	NORMAL	7,451.02	2.90	356.45	7,449.17	44.62	-23.53	44.62	1.16	1.11	8.98	22.90
	NORMAL	7,546.02	2.46	358.03	7,544.07	49.06	-23.75	49.06	0.47	-0.46	1.66	171.26
	NORMAL	7,641.02	1.97	1.92	7,639.00	52.73	-23.77	52.73	0.54	-0.52	4.09	164.88
	NORMAL	7,736.02	1.97	0.81	7,733.94	55.99	-23.69	55.99	0.04	0.00	-1.17	-90.55
	NORMAL	7,830.02	1.67	7.44	7,827.89	58.97	-23.49	58.97	0.39	-0.32	7.05	148.22
	NORMAL	7,925.02	1.62	18.80	7,922.86	61.61	-22.88	61.61	0.35	-0.05	11.96	104.37
	NORMAL	8,020.02	1.41	14.12	8,017.82	64.01	-22.16	64.01	0.26	-0.22	-4.93	-151.82
	NORMAL	8,115.02	0.79	19.13	8,112.81	65.77	-21.66	65.77	0.66	-0.65	5.27	173.68
	NORMAL	8,210.02	1.03	15.33	8,207.79	67.21	-21.22	67.21	0.26	0.25	-4.00	-16.02
	NORMAL	8,305.02	0.81	36.67	8,302.78	68.57	-20.59	68.57	0.42	-0.23	22.46	133.07
	NORMAL	8,400.02	1.06	22.23	8,397.77	69.92	-19.86	69.92	0.36	0.26	-15.20	-50.68
	NORMAL	8,495.02	0.88	32.40	8,492.76	71.35	-19.14	71.35	0.26	-0.19	10.71	141.28
4/4/2012	NORMAL	8,589.02	0.97	55.25	8,586.74	72.42	-18.09	72.42	0.40	0.10	24.31	87.89
	NORMAL	8,683.02	0.88	66.32	8,680.73	73.16	-16.78	73.16	0.21	-0.10	11.78	122.19
	NORMAL	8,778.02	0.62	107.98	8,775.72	73.29	-15.62	73.29	0.62	-0.27	43.85	135.32
	NORMAL	8,873.02	0.62	100.78	8,870.72	73.04	-14.63	73.04	0.08	0.00	-7.58	-93.60
	NORMAL	8,968.02	0.70	109.92	8,965.71	72.74	-13.58	72.74	0.14	0.08	9.62	57.40
	NORMAL	9,063.02	0.88	142.88	9,060.71	71.97	-12.59	71.97	0.51	0.19	34.69	85.42
	NORMAL	9,158.02	0.88	153.16	9,155.69	70.73	-11.82	70.73	0.17	0.00	10.82	95.14
	NORMAL	9,253.02	1.14	147.97	9,250.68	69.28	-10.99	69.28	0.29	0.27	-5.46	-21.99
	NORMAL	9,347.02	1.41	140.15	9,344.66	67.60	-9.76	67.60	0.34	0.29	-8.32	-36.75
	NORMAL	9,442.02	1.32	133.12	9,439.63	65.95	-8.21	65.95	0.20	-0.09	-7.40	-121.74
	NORMAL	9,537.02	1.67	137.78	9,534.60	64.18	-6.48	64.18	0.39	0.37	4.91	21.49
	NORMAL	9,632.02	1.85	136.28	9,629.55	62.05	-4.49	62.05	0.20	0.19	-1.58	-15.11
	NORMAL	9,727.02	1.56	137.54	9,724.51	59.99	-2.56	59.99	0.31	-0.31	1.33	173.26
	NORMAL	9,822.02	1.23	122.22	9,819.48	58.49	-0.82	58.49	0.52	-0.35	-16.13	-138.99
	NORMAL	9,916.02	1.58	120.82	9,913.45	57.29	1.15	57.29	0.37	0.37	-1.49	-6.30
	NORMAL	10,011.02	1.67	123.45	10,008.42	55.85	3.43	55.85	0.12	0.09	2.77	40.97
4/5/2012	NORMAL	10,106.02	1.58	129.08	10,103.38	54.26	5.60	54.26	0.19	-0.09	5.93	122.20
	NORMAL	10,200.02	1.41	127.23	10,197.35	52.75	7.52	52.75	0.19	-0.18	-1.97	-165.07
	NORMAL	10,296.02	1.67	117.48	10,293.31	51.39	9.71	51.39	0.38	0.27	-10.16	-50.17
	NORMAL	10,391.02	1.76	122.49	10,388.27	49.96	12.16	49.96	0.18	0.09	5.27	61.55
	NORMAL	10,486.02	1.23	129.96	10,483.24	48.53	14.18	48.53	0.59	-0.56	7.86	163.52
	NORMAL	10,581.02	1.67	123.87	10,578.21	47.10	16.11	47.10	0.49	0.46	-6.41	-22.36
	NORMAL	10,675.02	1.85	118.97	10,672.16	45.60	18.61	45.60	0.06	0.00	-1.84	-90.17
	NORMAL	10,771.02	1.76	107.02	10,768.12	44.42	21.37	44.42	0.40	-0.09	-12.45	-109.37

2.2.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/6/2012	NORMAL	10,656.02	1.85	119.32	10,653.17	45.90	18.07	45.90	0.30	0.24	-6.07	-40.11
4/7/2012	NORMAL	10,865.02	1.85	119.32	10,862.07	43.25	24.07	43.25	0.42	0.10	13.09	83.12
	NORMAL	10,959.02	1.76	122.13	10,956.02	41.74	26.62	41.74	0.13	-0.10	2.99	136.88
	NORMAL	11,054.02	2.02	131.71	11,050.97	39.85	29.11	39.85	0.43	0.27	10.08	55.40
	NORMAL	11,149.02	2.20	135.93	11,145.91	37.43	31.62	37.43	0.25	0.19	4.44	42.92
	NORMAL	11,244.02	2.37	132.59	11,240.83	34.79	34.34	34.79	0.23	0.18	-3.52	-39.75
	NORMAL	11,339.02	2.46	127.06	11,335.75	32.23	37.41	32.23	0.26	0.09	-5.82	-71.66
	NORMAL	11,434.02	2.46	128.81	11,430.66	29.72	40.63	29.72	0.08	0.00	1.84	90.87
4/8/2012	NORMAL	11,550.02	2.46	128.81	11,546.55	26.60	44.51	26.60	0.00	0.00	0.00	0.00